The modern technology are using education for adolescents

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Abstract

Today's youth have unprecedented access to modern technology and use them in expected and unexpected ways. Youth spend many hours a day using the technology, and the vast majority of them have access to Internet, cell phones, smart phone, video games and many more. Recent evidence raises concern about effects on academic performance. This chapter provides an overview of the impact of modern technology on the educational attainment of adolescents. The purpose was to examine the relationship between adolescent usage of computers and academic performance. Within the qualitative research the case study design was adopted. Interviews and focus group discussions were the primary tools used to gather data. The study found out that modern technology impacts learning both positively and negatively. Recommendations were made for parents, educationists, the media, and policy makers among others, for ways to increase the benefits and reduce the harm that technology can have for adolescents.

Keywords: Adolescents, educational achievement, modern technology, media

Introduction

Modern technology has experienced vast expansion in recent years, leading to its extensive use by people from all generations. For a generation of young people, technology has assumed a substantial stake in their social and educational lives. The vast majority of adolescents have access to computers, the Internet, cell phones, video games, and many other forms of modern technology. With the increased role of modern technology in the adolescents' lives has come the increased concern about how children might be affected. Technology is changing process and content to the extent that children today are immersed in a world that abounds with information The increasing amount of time children spend on modern technology has raised questions about the use of the technology.

This chapter provides an assessment of the impact of modern technology on the educational achievement of adolescents. Background The evolution of technology has dramatically changed society. An endless number of people all over the world use modern technology. Of the most profound changes in the past decade has been the widespread proliferation of information and communications technologies (UNICEF, 2011).

The growth of technology has changed the world, which in turn has changed the daily lives of adolescents. Dehmler (2009) asserts that children today are growing up in an interconnected, networked world. The youth have unprecedented access to modern technologies and use them in expected and unexpected ways. Teens all over the world are growing up in a world 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.

Children are immersed in a world abounding with information (Livazovic, 2011). While technology is often described as the most important influence upon society, it remains a subject which has undergone little study.

Recognizing that technology lies at the very heart of society, this study wishes to investigate its impact on adolescents. Technological advancement is one of the most essential factors for teenagers in many societies. Due to the enormous development of technologies, this era can also be called the Age of Technology. With the purpose of serving in the social, educational, and employment world, technology is becoming the most essential tool (http://www.customessaymeister.com). Social network sites, online games, video-sharing sites and gadgets, such as iPods and mobile phones are now fixtures of youth culture (UNICEF, 2011). They have so permeated youth lives that it is hard to believe that less than a decade ago, these technologies barely existed. Modern technologies have altered how youth socialize and learn and that raises a new set of issues that educators, parents, and policy makers should consider. An important question which this paper tries to address is how modern technologies affect academic performance of these adolescents. Technology is an integral part of most adolescents' lives, hence it is important to understand the impact it has on academic achievement.

Methodology

The study was undertaken to present a deep understanding of the impact of modern technology on academic performance of adolescents. The qualitative research methodology was used to guide the study. According to Babbie (1990) qualitative research is sensitive to contexts and lived experiences, and aims for in-depth and holistic understanding in an attempt to do justice to the complexity of social life. Within the qualitative research, the case study design was employed. The case study is an in-depth examination of a unit of interest such as an individual, and a company (Muranda, 2004:54).

A case study selects a small geographical area or a very limited number of individuals as subjects of study. Purpose of case study is to probe deeply, to analyze intensively so as to establish generalization about the wider population to

which unit belongs. The population of this study consisted of adolescents, teachers and parents. Purposive sampling was adopted for this study. Durrheim (2006) purports that purposive sampling ensures that a small number of people participate in the study. Qualitative research focuses on the richness of data where a relatively small sample is selected. The participants include 24 adolescents, 4 teachers and 4 parents. The researcher, as alluded to by Saunders (2009) was able to identify the participants as able to provide significant data. The research largely drew information from interviews and focus group discussions. Interviews are ways for participants to get involved and talk about their views. There is room for immediate feedback, probing and clarification. Leedy and Ormrod (2005) observe that in some cases, a researcher may want to interview several participants in a focus group to discuss a particular issue. Researcher can obtain a variety of opinions on a certain issue when time is limited. Discussion The study set out to investigate the impact of modern technology on the academic performance of adolescents.

It emerged from the study that modern technology refers to many forms of electronic communications, which include the Internet, which is accessible through both computers and mobile phones, and instant messaging services, such as Whatsapp. Dehlmer (2009) also asserts that modern technology refers to the types of devices most commonly used for communication and entertainment purposes, including: Computers (including Internet Access, Online Games, and other computer games); Cell phones (including phone calls and text messages); Console Video Games, and Television (including TV shows and movies shown on television and played on VCRs or DVD players). Thus, as also echoed by MacArthur (2008), the term Modern Technology is used to describe media ecology where more traditional media, such as books, TV, and radio are converging with digital media, specifically interactive media and media for social communication. All participants agreed that for adolescents, the modern technologies have assumed a substantial stake in their social and educational lives. The majority of the adolescents are increasingly connected in a virtual world using different technologies on a daily basis. These technologies popular among teens, as also alluded to by Mikulec, Goniu and Moreno (2013) include cell phones, television, text messaging and video gaming.

Of these Internet-using teens, approximately half use online social networking websites (SMS) such as MySpace (http://www.myspace.com) and face book (http://www.facebook.com). Thus adolescents are avid users of modern technologies. Social network sites, mobile phone operators, and other private actors are implementing savvy methods designed to appeal to youth in developed countries (UNICEF, 2011). Face book Zero was launched in May 2012 as a mobile site free of data charges and available in 45 countries, 10 in Africa. These developments are exciting and offer possibilities for transforming learning, innovation and much more. However, they also pose risk.

Although research on the effects of children's use of modern technology is still sketchy and ambiguous, some initial indications of positive and negative effects are beginning to emerge (Subrahamanyam, Kraut, Greenfield & Gross (2000)). According to the findings, adolescents' use of modern technologies has implications for educational practice because it is now a prevalent environmental factor in their lives. In the same vein, Watt (2010) posits that there is need for professionals working with young people to have a fully informed evidence-base as to the possible benefits and drawbacks of modern technology. A growing concern for parents, educators and others involved with the welfare of adolescents is related to young people's ability to use these tools safely and effectively. Findings of this study indicate that modern technology has both positive and negative effects in the area of education. According to the study findings, teenagers frequently use the computer and Internet for their schoolwork; they use them to complete school assignments. Students can learn from computers to become independent learners. In line with this finding, Marshal (2002) cited in Honey, Culp and Spielvogel (2005), found strong evidence that modern technology complements what a great teacher does naturally, extending their reach and broadening their students' experiences beyond the classroom. Honey et al (2005) go further to say young people are taking advantage of the new powerful technology. Three quarters of online teens use instant messaging, representing close to 16 million youth. Of these 16 million, 78% say they use instant messaging to talk about homework, tests or schoolwork. Subrahmanyam et al (2000) posits that cognitive researchers suggest that for example, playing computer games can be an important building block in enhancing children's ability to read and visualize images. Playing specific computer and video games have been found to have immediate positive effects on specific cognitive skills. They may improve problem solving skills.

Modern technology also motivates and engages the learner when students have a choice in their assignments, see the relevance or can self-assess with teacher-feedback intertwined, student motivation increases (C. O'Hara and Pritchard, 2010). The study also is in agreement with these findings. The rapid evolution of modern technology has indeed broadened society's vision of the technologies as tools for developing children's skills and motivating in academic areas such as Mathematics, Science, Language arts and writing. Even parents generally believe that modern technologies are an important educational resource. Among teens, schoolwork has surpassed games as the most frequent online activity.

Implications

The findings have implications for schools using or planning to use modern technology. Modern educational technology is less effective when learning objectives are unclear and the focus of the technology use is diffused. The schools need to convene a technology planning team comprising administrators, teachers, technology coordinators, students, parents and representatives of the community (community-wide involvement) to determine the educational goals for students and types of technology that will support efforts to meet the goals. The team should also develop a vision of how technology can improve teaching and learning. Students cannot be expected to benefit from technology if their teachers are neither familiar nor comfortable with it. Many teachers fall behind their students when it comes to modern technology skills and competences, thus making it difficult to interest, motivate and engage children in conventional lessons. They need to have experience with the technology. Hence it is important to provide professional development to teachers to help them

not only to learn how to use new technology, but also how to

provide meaningful instruction and activities using technology in the classroom.

Conclusion

Modern technology is transforming the experience of growing up of adolescents. It brings the good and bad to the adolescents. At its best as conclusively remarked by Honey (2005), technology can facilitate deep exploration and integration of information, high-level thinking and profound engagement by allowing students to design, explore, experiment, access information and model complex phenomenon. High level engagement in social networking causes students to lose focus on academic tasks and negatively affects their academic results. Using media as both a source of information and a means of communication are an integral part of curricula in many developing countries. Competence in technology usage is therefore the key to adolescents' academic achievement in schools. With ever-expanding technology, there is an unprecedented need to understand the recipe for success, which involves the learner, the teacher, the content and the environment in which technology is used.

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