

THE INFLUENCE OF DIGITAL TECHNOLOGY ON SECONDARY SCHOOL STUDENTS ACADEMIC ENGAGEMENT BEHAVIOUR IN NIGERIA.

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Abstract

The paper considered digital technology as an important working instrument for information, entertainment and education as being crucial in enhancing or hindering secondary school students' academic engagement behaviour during learning or when being taught. The paper highlighted the benefits digital technology plays in learning. It also examined the cons digital technology has on the students' academic engagement behaviour in the classroom or at home since much time and attention could be wasted by the students in watching television, engaging in the internet or using other devices, which could have serious effects in their behaviour as a whole and academic participation. The paper further examined the ways teachers and parents can use technology appropriately to improve students' engagement in their academic tasks, and the challenges restricting the usage of digital technology. Recommendations were made for both the teachers and parents in monitoring their children/ward for appropriate use of technology which could foster academic engagement and subsequently improved academic achievement and life success.

Keywords: Digital Technology, Academic Engagement Behaviour, Students.

Introduction

We live in a society presently whereby the way people interact and share information has significantly changed. As technology advances, traditional methods are forgotten and replaced by modern digital approaches which have redefined the ways things are done, and introduced new culture quite different from what previous generations were used to. To a very great extent it is more difficult to identify the area of our lives that has not been affected by these new technologies than the areas they have affected. These changes actually brought a lot of challenges that bear upon the development of the child. Therefore digital technology is being used in many aspects of our lives and society such as education.

Digital technology is the term used to cover all the computing and telecommunications whether in research, teaching, entrainment and administration. Digital technology is a broad term which includes; communication devices or applications, radio, television, laptop, iPod, iPhone, androids phones, blogs, social media, digital games, network hardware and software, satellite system etc. It also include various services and applications associated with them such as video conferencing and distance learning. It is an integral aspect of both the teaching and learning process. For instance, teacher's uses technology to improve the effectiveness of instructions in the class, motivates students, school attendance, students participation, and can be used as both a learning and communication tool. Technology forms the bases for life learning and problem solving. Students can use technologies in their academics, works and other areas of interests. Digital technology when used for the purpose of learning enhances students' engagement in learning by searching the web for information to complete individual and group assignments, communicating via the e-mail, allowing them to connect with their peers, and for entertainment. (Adomi, Okiy, & Roteyan, 2004).

The emergence of digital technology has been a thing of joy, interest and entertaining to members of the communities. These technologies such as the internet and the assessment of database would help secondary school students to communicate with one another, to be able to search for educational information that will help them in their school tasks and be able to know what is happening around the world (Idow, Idowu & Adawgouno, 2004).

Most teenagers in the secondary schools today, are fully aware of the benefits that can be derived from the use of technology, e.g the internet. Studies have shown that students constitute the highest users of the internet in African Countries, and most of them use it for E-mail communication. These teenagers and young adults usually send e-mail to communicate with their friends or partners. The effect of these affects all aspects of their lives. In Nigeria, digital technology may be an invaluable instrument for learning and teaching (Ojedokon and Owolabi, 2005).

The developed countries of Europe and America have less problems meeting the educational resources needed by their students. Educational sources such as books, CD-ROM, projector, and the internet are in abundance. The emergence of digital technology in developing countries has bridged the digital gap. This enables students and adults to access and participate globally in sharing of information resources. Hence, secondary school students are now enjoying the existence of digital technology in enabling them to use and tap the available educational resources open online in making new friends internationally, distance learning also known as the E-Learning, sport and

entertainment. Secondary school students are in the age of digital technology of acquitting themselves with information that could either affect their academic engagement or disengagement behaviour. (Adeogun, 2005)

Concept of Academic Engagement Behaviour

In education, academic engagement means students getting along well with their teachers and peers, having interest in learning and the subject content. It is the extent of attention, interest, passion and level of motivation that the student exhibits when learning or being taught. Students are engaged in learning when they are interested and inspired in the subject matter and disengaged when they are being bored, not passionate about learning. Research findings revealed that children spent so much time and attention in browsing the internet and watching television screen other than engaging in their academic work. Subrahmanyam, (2000) asserted that children play games, watch television screen, and browse the internet at home to download lyrics of songs, movies, pictures of popular stars at the detriment of their academics. Some parents even consider computers favorably to their children and considered those children without home computers to be at a disadvantage.

The Relationship between Digital Technology and Academic Engagement of Students

Today's children are raised in a digital age. Digital technology is a tool for entertainment, information and education. As parents and teachers, high level of the child academic engagement should be a priority. Engaging the child may be difficult since the child is always faced with lots of distraction when being taught, thereby decreasing the attention span and academic engagement. Instead of viewing technology as a disadvantage, both the teacher and parents can take advantage of it to enhance the child academic engagement. The level of academic engagement of the child, determines how he can learn. The teacher can engaged the child in learning if the topic is presented to the child in manner that the topic has a clear meaning and interest to the child.

Digital technology is one of the ways that can be used to get students engaged and feel excited about learning. Students varies in different aspects of life such as, different socio-economic background, culture, brain, different family, and personality type, with digital usage they are more likely going to be engaged, work together, get excited and direct learning in and out of the classroom. Digital technology provides students with lotsof benefits, providing different learning opportunities in their academic activities and life. Those

students, who are digitally literate, have a variety of social, emotional and cognitive skills which are required to appropriately function within and outside the classroom context. Without these important skills students may be at a great disadvantage and could be missing out on positive opportunities. Students' academic engagement behaviour can be enhancing through the usage of digital technology. E.g the Ipad and iPhone are important because they allow students to learn, to solve problems together and it brings reality into learning.

Ways Parents and Teachers can use Digital Technology to facilitate Students' Academic Engagement.

Digital technology appears to be an important tool in enhancing academic engagement of the child; it is growing rapidly in and out of the classrooms settings. In this 21st century classroom learning environment, the students and their teachers has a lots of opportunity to collaborate and set learning goals, carry out experiment that is interesting to the student. Digital technology for the teacher is one of those ways to increase the child learning engagement. Since these devices can either be used for good or bad, these are some of the ways teachers and parents can use to engage children better in learning through the use of technology.

- ✓ Student and Parent/Teacher Relationship: The use of technology and students' academic engagement in the classroom or at home is central to the relationship between the parents, teacher and the student in creating learning experiences. Technology on its own cannot keep the child engaged for too long if there is no cordial relationship existing among them. The teacher and parents can foster the child's academic engagement by observing them on how they interact or use the technology, getting feedback from them on the use of technology and ensuring that they use the device for the purpose of learning since the child may use it differently.
- ✓ Involving the Students in the process: when students are involved in creating their own ideals about a concept, when they are given the opportunity to learn by bring together their ideals or pictures of events or situations, this can boost their interest and engagement in learning.
- ✓ Students can also be engage in learning better through the use of social media where they can exchange or share ideals together.
- ✓ Teachers can also engage the learners better by using the method of storytelling in the classroom. Digital media such as music or images can be a great way to facilitate empathy, group work, co-operation among learners in the classroom.

- ✓ Children can also be encourage in their science subjects by allowing them use technology such as the TV screen in watching animal stations like the iMovie's channels. They are encouraged to record and explain what they watch in the video. This can help them to boost their understanding of the concept or subject matter when being taught in the classroom.

The Relevance of Digital Technology to Academic Engagement Behaviour of the Nigerian Students.

Despite the flux of these technologies, the emergence of digital technologies has rendered many benefits to children, enabling them to connect with their peers, they aided the speed at which students access educational information, help in flexible instructional strategies and the accommodation of children with special needs in regular classrooms, basic problem solving skills, entertainment and also help the teacher to present information in such a way that it can be interesting to students. Some of these benefits also include:

1. The use of digital technology helps to received immediate feedback: The use of digital technology in the classroom learning situation allows the students to learn more effectively and increase student academic engagement through the internet polling with instant results.
2. Digital technology promotes academic participation in the classroom: the internet and other devices helps to engage students including those who are withdrawn or shy, who wouldn't want to participate in the topic or raised their hands normally in the classroom.
3. The use of digital technology in and out of the classroom environment can make learning more interesting and effective to the children.
4. Digital technology can speed up difficult tasks: technology helps to speed up tedious, and time-consuming work by allowing the teacher keep track of students' performance and participation in their academic activities as well as answering students questions which could seem difficult due to the children's objective nature.
5. With the use of digital technology, the students have quick access to new information that would increase their learning experiences.
6. Digital technology is a life skill: it helps learners have a deeper understanding of the digital world, enabling them to adapt to new contexts and with peers. Technology allows the child to differentiate between reliable from unreliable source of information in the internet. All these are vital skills that students can learn with the use of digital technology within and outside the classroom environment to foster academic engagement.

The disadvantages of Digital Technology to the Child Learning Behaviour

Digital technology has disconnected children from their parents, peers and academic activities, making it difficult to acquire social skills, communication skills, emotional skills, and basic problem solving skills which may have adverse effect on the child's moral, attitude, psychological well-being, habits and learning behaviour, since so much time and attention could be wasted by the child in engaging in the internet. Some of the cons include:

1. Digital technology can be a source of distraction to the child: the child may disengage from learning activities or learn less when he or she use technologies such as tablets, iPhone, Ipad, Androids, Phones, Laptops, watching television screen or using other devices during lectures. The uses of these devices distract the child from learning thereby reducing his attention span and academic engagement.
2. Digital technology can disengage the child from social interactions: spending too much time and using modern electronics devices may cause social withdrawer or hinder social skill development through decrease face to face interacting with people at home and in the school.
3. Technology can increase examination malpractice in the classroom: technology now makes it easier for students to engage in examination malpractices, coping and pasting other peoples work. It can really create an avenue for students to cheat.
4. Sleep deprivation: Excessive use of electronic devices relates to sleep deprivation, which affects growth and development in children and adolescents. Risky sexual behaviour: sexual content and increased availability of the internet and electronic devices may increase risky sexual behaviour.
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6. Aggressive behaviour: Violet content of videos and online games may have adverse effects on the behaviour of children, adolescents and adults
7. Other social and psychological problems: Excessive use of the internet and electronic devices can be associated with a range of social and psychological problems such as psychological well-being, poor self-confidence, and reduced academic performance.(Unachukwu, Ebenebe & Nwosu, 2019).
8. All students may not have access to technological tools: since some of these devices are expensive, some students may not have the means to afford them. For such students, the teachers can recommend the use of library or work in groups with their peers and share resources.

9. The quality of information they get online may not be reliable: students may not be able to identify reliable educational sources from unreliable sources. Hence, they should be properly guided on how to differentiate between reliable and unreliable source of information.

It is seen that the advantages digital technology has in the child's learning outweighs the disadvantages. Digital technology should not be used inappropriately but to create effective learning and innovation in order to foster learning.

The Hindrances to Effective Utilization of Digital Technology in Promoting Academic Engagement Behaviour among students in Nigeria

Secondary school teachers and students depend on digital technologies to facilitate teaching and learning. Some of the problems associated with the use of technology include:

Unreliable Power Supply

The nature of electric power supply which is common in Nigeria is one of the challenges restricting the use of these technologies among students in the secondary schools. The unavailability of power supply appears to be a barrier to the operation of the devices which leads to hindrance of information.

Computer Illiteracy

Another serious problem of the use of digital technology is the computer illiteracy of most secondary school students and teachers. It is expected that both the teacher and student should have digital literacy skill. The ability for them to use the technology enables them to easily share information globally while the inability to use it poses impediment in their academic work and career in future.

Lack of Technical Know-how.

Both the students and teachers do not possess adequate knowledge and skills to enable them make good use of communication technology facilities in the classroom

Expensive Cost of Communication Services

The communication technological services are quite expensive in Nigeria where we have a bulk of people as belonging to low income per capital earners. As a result they find it difficult to buy these gadgets. For instance, the cost of a laptop is quite expensive and it is out of reach of the average students in our secondary schools in Nigeria.

Inability to understand messages from others

It has also been observed that a good number of persons misunderstand messages sent through some of these communication devices. For instance, reading and sending of emails is still problematic among teachers and students.

Corruption in the Society

In the Nigerian society, there has been too much evidence of corruption and insecurity. This development hinders the growth of technology (Okorodudu, 2010).

Summary

This paper examined the meaning of academic engagement behaviour, the relationship between academic engagement behaviour and digital technology, ways parents and teachers can use digital technology to facilitate students' academic engagement, the relevance of digital technology to academic engagement behaviour of the Nigerian students, the disadvantages of digital technology to the child learning behaviour, and the hindrances to effective utilization of digital technology in promoting academic engagement behaviour among students in Nigeria.

Conclusion

The discussion made in this paper on digital technology and students' academic engagement behaviour in the secondary schools has a lot of benefits as well as its constraints to students when wrongly used. The conclusion is drawn that the government and other stakeholders in the educational system as well as professional counsellors, teachers, parents, students, including members of the Nigerian Council of Educational Psychologists (NCEP) should endeavor to encourage acquisition of computer knowledge and skills as well as make available the tools of technology for use in the schools in Nigeria especially in this digital age.

Recommendations

Since digital technology is an integral part of our daily lives and has the potential to influence teaching and learning process, it is recommended that:

1. Parents, teachers and other significant persons should carefully monitor their children as they use digital technology to avoid distractions and sexual materials.
2. Teachers should make sure that these technologies are integrated in their classroom activities which will help students see the usefulness of

these technologies and use them for academic purposes. Also, teachers should always assist students in the application of technology when they need help.

3. Parents should be role models to their children. They should be mindful of the kind of content their children are exposed to.
4. Deliberate efforts should be made by teachers to reduce the time students spent online, which can be done to by encouraging face to face conversations with parents and peers. There should be time out for children so that they can learn from significant persons in their lives.
5. Computer training should be included in the school curriculum and be effectively taught to eradicate the problem of computer illiteracy of secondary school students.
6. There should be constant electric power supply in order for information to be easily accessed by teachers and students in the secondary schools in Nigeria.
7. In this information age, digital technology should be use among secondary school students in the classroom to facilitate studying and teaching.

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