

Mindful Learning versus digital Learning

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Abstract:

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Children in the 21st century have no choice to be isolated from the digital world as they almost grow up with devices from an early stage. Availability of internet service and digitization expanded the access to the children for learning opportunities, even those who belong to the remote area of developing countries. Since the internet services have connected people globally, creating many opportunities and adding new challenges to young children, such as cyber bullying. Despite the numerous advantages of Information, Communication, and Technology (ICT), experts worry that children spend most of their time with a device, contributing to digital dependency and screen addiction. It has changed the children's way of life, thought, and experiences, as these issues are the subject of public debate of overuse of the internet increased the threat to their well-being. One of the significant risks is that children are facing mental health problems, including anxiety, depression, and lack of inner peace. Thus, the education system should rethink on balancing digital learning and real-world context learning in 21st century education system.

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Keywords: *Mindful learning, Learning in the digital world, Digital dependency, Blended learning*

Introduction

New technology replaced a way of life, which intensely impacts on way of teaching learning process. The teaching and learning methods have changed over a period of time. The traditional methods have been replaced by modern methods (Sharma, 2018). The emerging modern technology has changed how society relates to knowledge. The relentless rise of new technologies substituted as well disrupted the traditional ways of acquiring an education (Greenwood, O'Leary & Williams, 2015). Information Technology (IT) having a major impact on all sectors including education system. With increased easy access of IT in home and school,

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it is promoting numerous learning opportunities as well as sharing the knowledge throughout the world (Bhakta & Dutta, 2016).

In traditional approach, teacher is considered as all in one having the main source of knowledge and directed the flow of information to the student as a receiver. Typically, it is based on teacher-centered approach and classroom based, where learners depend upon the teacher who determined the entire learning paradigm. In this method the learner's skill, knowledge and practice is of little value. There is less creativity whereas learners reproduced what the teacher told them over and over again (Munienge & Muhandji, n.d.). Despite, the information would be delivered through lectures and whole class discussion, most of the traditional classroom used textbooks, chalkboards, paper and pencils for teaching and learning. Specially, traditional education system is centered on such sources like schools, teachers and print media. Students have an opportunity to ask questions on any perception to the teacher, if they are confused (Simpson, 2013; Wikramanayake, 2005).

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Globalization, new technologies, migration, transnational competition are the major factors drive the acquisition of skills and knowledge needed by students to survive and succeed in the twenty-first century (Scott, 2015). Some devices like computer, laptop, smart phone, and tablet are frequently using in 21st century as a learning tools (Simpson, 2013). In this era, massive use of multimedia and web based learning is very common in teaching and learning from West to East (Nooriafshar, 2007). Before 1990, classroom have been giving more preference on face to face method, and later mixed approached were begun with enabling face-to-face and e-learning variant. At present, we are the witness of radical changes in pedagogy where classrooms are modified with the most profoundly practice of e-learning (Hamiti & Reka, 2012).

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Mindful Learning

Mindfulness is an English translation of pali word *sati* (Nyanatiloka, 1980) and *sati* is originates from Buddhist philosophy according to the Buddhist literatures. The word Sati is derived from the Sanskrit word *Smriti*, which means memory (Kuan, 2008). "The mindfulness (sati) is mostly linked with clear comprehension of the right purpose of suitability of an action and other considerations" (Thera, 2001 p.vii). It has been described as "the awareness that emerges through paying attention on purpose, in the present moment, and non-judgmentally to the unfolding of experience moment by moment (Kabat-Zinn, 2003 p.144). However in meditative context, *sati* is

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not an equivalent of the function of memory but of recollecting and a particular way of remembering (Gethin, 2001).

Mindfulness is a special technique, which helps to comprehend, what's happening in the present moment (in our mind, body and surroundings), without judging anything (Mind, 2018). The way of mindfulness is a meditation, which aims to help us; become more self-aware, feel calmer and less stressed, more able to choose how to respond our thoughts and feelings, be kinder towards own self (Mind, 2018). The mindful based meditation showed various benefits in all age groups, especially it is helpful for mental health related problems like; depression relapse prevention, reduced anxiety, panic disorder and stress, ability to cope with emotion, changed addictive behavior and reduced insomnia (Hassed, n.d.; Mental Health Foundation, 2012).

In neuroscience, it helps for structural and functional changes in the brain, generation of new brain cells (neurogenesis). The results showed positive changes in the structure of the brain those who are doing meditation regularly, and even have a positive effect on physical problems such as hypertension and heart disease (Mental Health Foundation, 2012). It is observed, most striking changes in long-term meditators, even brain changes are clearly observable in those people who just have started meditation not more than eight weeks for an average of under half an hour a day (Weare, 2012). Similarly, in clinical perspectives it is supportive for pain management, symptoms control, coping with major illness like cancer, hormonal changes and possibly, slower aging (Hassed, n.d.). Mindfulness intervention become more popular in teaching learning process as well, it is directly contributed to cognitive development of the students and improved performance in learning. It is found student becomes less stressed and more focused on the task due to improved concentration power. They are able to perform better along with the study and other activities like sports and creative works for example (Weare, 2012).

Among numerous benefits, one of the major contributions of mindfulness is to promote positive relationship among the people as shown by the following diagram:



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*Fig. 1 Mindfulness to promote positive relationship among the people
(Sourced: Adopted from Mental Health Foundation, 2012, New Zealand).*

The mindfulness practices boost up the one's ability to better understand the importance of relationship, do respect on other's feelings, thoughts, emotion and respond appropriately (mental health foundation, 2012, New Zealand).

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In recent years, many studies have been conducted on mindfulness and its effects on the children. The studies justified with evidence that nowadays, practice of mindfulness in the classroom is widely accepted as it has many potential benefits to the young population. Practices of mindfulness succeed to develop such qualities like; attention skills, positive changes in behaviour and emotional regulation. Teachers who are experiencing problematic behavior of the students can take advantages from the mindfulness. Teachers either incorporate mindfulness practices into their daily routine or directly integrate through the curriculum (Koch, 2016).

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Teaching and learning in digital world

The modern society is mostly depending upon advanced technology, with internet breakthrough an intelligent mobile devices become popular. These changes unlocked restrictions on time and space while the devices turn into ubiquitous learning tool at present. The technology has made accessible and transmittable almost all kinds of information in most advanced places to remote and to all groups of people. The technology has also broken the barriers in most parts of the world and opened the door of access in education. Along with these changes; ICT has become an integral part of human life (Wikramanayake, 2005).

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Traditional teaching methods have been phased out with designing teaching activity for digital learning. Fast multitude and flexibly applying technology tools are the key issues for current information technology integrated education (Lin, Cheu & Liu, 2017). In this 21st century, the term, "technology" is an important issue in many fields including education. This is because technology has become the knowledge transfer highway in most countries (Grabe, 2007). These new technologies bring fundamental changes to the lives of 21st century children, who are the most frequent users of emerging digital and online services (OECD, 2016, cited from OECD, 2018 p.7).

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The school and other educational institutions which are supposed to prepare students to live in “a knowledge society” and this impose mandatory provision to consider ICT integration in their curriculum (Ghavifekr, Afshari & Salleh, 2012). Integration of Information, Communication, and Technology (ICT) will assist teachers to the global requirement to replace traditional teaching methods with a technology-based teaching and learning tools and facilities (Ghavifekr & W.A.W., 2015). For children, the online world presents many opportunities as they are able to learn new things without any guidance, have connection with different people globally, opportunities to observe new places via the internet which opens up a world of possibilities (UNICEF, 2018). Digitalization allows children to connect with friends including made easy for children with disabilities, available varieties of technology provides access to education for children living in remote or marginalized areas. Greater online connectivity has opened new avenues for civic engagement, social inclusion and other opportunities, with the potential to break cycles of poverty and disadvantage (UNICEF, 2017). A visual presentation, educational videos, interactive programs including learning tutorial materials seems more attractive for children. Variety of books and other learning materials available all the time on internet has revolutionized education in a better way (Sundus, 2018).

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Fig.2 Teaching and learning in digital world

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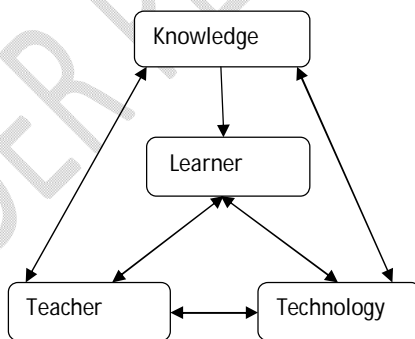


Diagram adopted from Hamiti & Reka (2012).

With emerging advanced technologies, the multitude user of social media is aggressively increased all over the world. Engaged with social media is one of the most common activities among children, adolescents, and emerging adults nowadays. It offers today’s youth a portal for

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entertainment and communication and it is becoming one of the main platforms for accessing information and news (Mowafy, 2018).

Digital dependency and its impact on children

Young people including children are more connected with digital technology than ever, digital technology includes digital devices such as: computers, tablets and mobile phones. Children of today are much cheerful to engage via internet using such gadgets as well as many digitally mediated activities (Winther, 2017). The 21st century is an era of advanced technology, indeed, from babies to school-age, children are digital consumers, often using TV, computers, gaming systems, even smartphones and tablets. The problem is anywhere that, when the children becomes able to grasp an object in their hands, they begin to play with their parent's smart phones or tablets (Kim, 2013). They are despondent for face-to-face interact with family members and other people, although inseparable from mobile phones and social media as they are much dependent on them. They spend every spare minute with gadgets and internet which reduces their ability to socially interact with others outside in the real world (Alghamdi, 2017).

Numerous harmful issues have been associated with children's digital dependency (Kim, 2013). One of the most horrific effects is children's neurological development, which is influenced by their early experiences and the environment which can alter gene expression and affect long-term neural development (Sigman, 2017). Experts including journalists from mass media and the popular science press - occasionally claim that harmful structural brain changes can occur also from using digital technology (Ferranti, 2016 as cited by Winther, 2017). On the basis of empirical evidence, an extensive exposure to videogame playing during childhood may lead to neuroadaptation and structural changes in neural regions associated with addiction. Digital natives exhibit a higher prevalence of screen-related 'addictive' behavior in comparison with digital divides (Sigman, 2017). Media reports sometimes claim that internet use and new technology can 're-wire' children's brains and make them addicted (Ferranti, 2016 as cited by Winther, 2017).

There are other many risks factors besides brain development due to extreme usage of digital devices in early age, some of other threats to the children are: children's eye health problem, problem with physical development and obesity, problems of insomnia, attention problem, lower academic achievement, social development problem, language development problem and mental

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health associated other problems (Kim, 2013). No doubt, digital technology offers the life of people incredibly easy and comfort, but it seems disaster for than all round development for children. Evidences explained; half of all mental illnesses begin by the age of 14 and three quarters by the mid-20s. With anxiety and personality disorders sometimes begin around age 11. Mental health problems represent the largest burden disease among young people (OECD, 2018a). The children are affected by three ways as provided by UK internet providers on potential risks factors into 3Cs as:

- Content—what are children looking at and whether they are accessing inappropriate content.
- Contact—who are they speaking to—strangers and people presenting with false identities.
- Conduct—how they present themselves and engage with others, and the prevalence of online (house of commons, 2019).

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There is a huge debate and contradictory opinion been started to spread through mass media where digital education system is worth taking or not? Very hard to manage the isolated life beyond using the technology, but today's generation is often referred to as *digital human* or even *digital natives*. There is also question mark on whether electronic devices is actual needed or just a desires of fashion to possess latest devices and obviously, most advanced software for these devices (Makosa, 2013).

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Blended learning

Education system of any country is always guided by the demands, the rapid changes and increased complexity of today's world present new challenges which also imposes to address new demands on the education system everywhere (Bar-yam, Rhoades, Sweeney, Kaput & Bar-yam, 2002). As a world becomes more globally connected and integrated, no one can deny the increasing trend of internationalization of identity. This tendency oblige the every education system should rethink towards the learners to be citizens of the world, not just of their own locale. No doubt, in this highly demanding environment, need to consider relevant education system that enable the student in this diverse world with necessary skills (Bertram, 2016; Bar-yam, Rhoades, Sweeney, Kaput & Bar-yam, 2002).

At present many educators and trainers suggested blended learning approach especially in school education system, this approach “provides innovative educational solutions through an effective mix of traditional classroom teaching with mobile learning and online activities” (department of

education, 2012). The Queensland University of Technology (2011) offers a very up-to-date definition on blended learning as: Blended Learning is a practical framework that can be used to encapsulate a range of effective approaches to learning and teaching. It encourages the use of contemporary technologies to enhance learning, and the development of flexible approaches to course design to enhance student engagement (Mazohi & Reitano, 2016 p.4).

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Children learn most of things before the age of five and it is proven statement that our brains are designed to be effective when we interact with our surroundings which stimulates curiosity and exploration (Sundus, 2018; Kim, 2013). Exposures of gadgets from the beginning of the child's learning linked to cognitive delays and social interaction is bounded which results in impaired learning. Researchers at the University of Washington reveal that modern gadgets are not necessary in child development, thus, it is suggested for zero media use for this group (Sundus, 2018; Kim, 2013).

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Fig.3 Real world and Virtual world: A Model Study

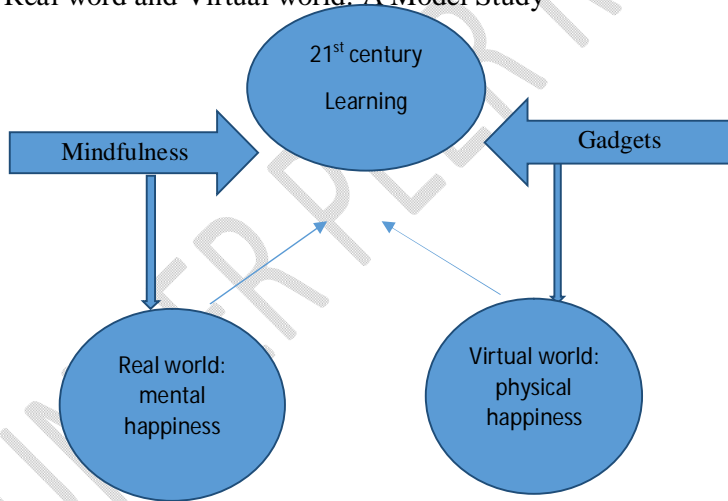


Diagram prepared by author

Conclusion

Almost none of us can imagine the life without using internet and technology; practically it is impossible. For children, online learning provides more opportunity through access in educational materials available in internet in anytime and from anywhere. It allows student to

attend the classes even from home or from anyplace. They can develop new technical skills as newer generation is more internet savvy than digital migrant. Although, digital based learning or e-learning lacks face to face communication which contributes for social isolation. Student who prefer for e-learning also lacks communication skills. Children who are internet addicted facing mental and physical health problems like: anxieties, sadness, depression, sleep deprivation, obesity, eye problem and many others. Thus, it is widely considered as the mindfulness-based learning is effective for addressing these rising issues in young children.

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Comment [A. A.51]: include some recommendations based on your study's observations.

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