IMPACTS AND EFFECTIVE COMMUNICATION ON GENERATION Z IN INDUSTRIAL REVOLUTION 4.0 ERA

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ABSTRACT

Generation Z (Gen Z), those who were born between the mid-1990s until mid-2000s are closely related to the emerging Industrial Revolution 4.0 (IR 4.0) era. Both positive and negative impacts towards the social development and communication of Gen Z are apparent. The purpose of this study is to describe the influence of technology on Gen Z and to discuss the effective means of communication when interacting with this group of people. A systematic review and documentational analysis approach is adopted. The outcome of this study indicated that advancement in technology has hugely affected the social communication skills of Gen Z. It is suggested that the means of approaching this generation requires comprehending their way of thinking, communicating with them in their “tech-language”, and to always be updated with the advancement of information technology (IT), thus ensuring relevance to be in their environment. All these require groundwork efforts to have direct interaction with them according to the ways of Gen Z.

Keywords: Generation Z, Impacts of Technology, Effective Communication

Introduction

Community changes across generations are mostly influenced by the community changes at the global stage. Normally, the generation is named after the growing industry’s factor at the time. For instance, within the Industrial Revolution 4.0 era, the social community is influenced by digital technology and the internet. The current generation’s thought, view and culture are dominated by digital technology and the internet which also influence the generation’s behaviour. Issues and challenges concerning the generation involving the use of technology and communication begin to be the headline of generation Z’s discussion and thinking. It becomes a challenge to the nation in fostering Malaysia’s values among society. It is crucial for the researcher to identify the effects of technology as well as to understand the psychology of generation Z’s communication. Thus, this article discusses who belongs to Generation Z, their criteria and the impact of the Industrial Revolution towards Generation Z as well as the effective communication methods in facing the challenges confronted by Generation Z.

Generation Z and their background

Generation Z refers to individuals who were born between 1994 and 2010 (Schawbell, 2015). Whilst, Thomas & Srinivasan (2016) classifies Generation Z as those who were born between 2000 and 2025. Hence, both definitions interpret Generation Z as the current teenagers and youngsters who now are attending schools or college. This leads to the current study to focus on Generation Z as this generation is relevant to this era.

According to Thomas & Srinivasan (2016), each generation has its own pattern of criteria. Both Schawabel (2016) and Thomas & Srinivasan (2016) view Generation Z to pose a higher level of curiosity and promptness compared to the previous generation, especially
Generation Y. Generation Z, whose relevant to the names, “The Internet Generation” or “Digital Native”, are more passionate and independent. This is the result from the generation being prone to challenges, wanting to initiate changes, wanting to solve problems, loving uniqueness and loving to work alone (Isabile, 2017; Mohr & Mohr, 2017). In addition, according to Thomas and Srinivasan (2016), Generation Z has a higher tendency to treat what they are passionate about as a job and also know how to transform their hobbies to a business. This development of trend is due to the world’s economy and financial crisis which then affects their upbringing. In addition, this generation also has the edge in empowering informational technology and communication (ICT) (Thomas & Srinivasan, 2016). Therefore, there is a need to study the impact of communication methods towards empowerment of knowledge and skills to Generation Z.

Due to Generation Z’s different environment from the previous generation (born and raised in the era of peaking ICT), the way Generation Z thinks is different from the previous generation (Rothman, 2016). Overall, in learning, Generation Z’s cognitive functions are prone to process knowledge disseminated through visual and practical methods such as interactive games, collaborative projects and challenging tasks rather than lecture and discussion (Rothman, 2016; Thomas & Srinivasan, 2016). Generation Z appreciates more on things that they can see and try for themselves (Thomas & Srinivasan, 2016). Thus, the presence of Generation Z in nowadays learning environments should be comprehended to evaluate the effectiveness of the communication used against Generation Z.

Realising this situation, Mohamed Amin Embi (2016) stated that the conventional teaching method in the classroom should change if we are to produce competitive, innovative and creative graduates. Thus, educators are to take initiative in creating the new teaching and learning environment that suits Generation Z. In relation to this, Mohamed Amin Embi (2016) listed three steps in developing the environment. First, understand Generation Z and their learning styles; secondly, redefine the content-centred and teacher-centred conventional teaching to be relevant and to prepare students in facing the future; finally, redevelop 21st century learning in Industrial Revolution 4.0 suited to Generation Z.

Criteria of Generation Z
According to Don Tapscott (2009) in his book Grown Up Digital, Generation Z is seen as the tech-savvy generation of which was earlier exposed to the internet and web, since they are toddlers. In other words, Generation Z grew within the world that is connected through the ever-expanding technology. The development of the technology that imitates reality is giving Generation Z an advantage. They can communicate across the globe for vast arrays of information with no limits. They communicate among themselves through the internet and social media and thereby they are called iGeneration, internet generation or net generation.

Based on the previous study, there are a number of criteria posed by Generation Z. This generation has their own unique criteria, especially in the aspect of digital technology and cyberspace. Among those, as listed by Yanuar Suraya (2016), are as follows:

1. Able to multitask.
2. Obsessed with the virtual world.
3. Information technology is instilled in them.

Apart from that, Hairol (2017) also pointed out that Generation Z is:

1. Consists of youngsters.
2. Evolving fast especially in the digital aspect.
3. The ones who are enjoying the fruits from the country’s development.
4. Critical, innovative and their life value is relevant to the global trend.

A study by Oblinger & Oblinger (2005) identified several different criteria that distinguish Generation Z from the previous generation which include:

1. Known by the name, internet generation or net generation, platinum generation and the gadget native.
2. Digital literate. Apply all sorts of digital technology and visual, and prefer visual than text.
3. Loves to communicate. Frequently communicate through internet connection either via smartphones, tablets and laptops anywhere.
4. Fast. Requires fast information which sometimes leads to accuracy negligence.
5. Experience. Likes to learn from experience rather than being told.
6. Social network. Likes to stay connected even if they are anonymous to each other.
likes to play online games, prefers to upload pictures of their daily routine for the public to view and etc.

7. Visual and kinaesthetic. Prefers visual aids than texts.

According to the criteria emphasised by the researchers, it is proven that Generation Z is significantly different in terms of their passion, skill, mindset, attitude and action. They have unique criteria as a result of the development of technology and social media that influence their psychology and mindset. The Generation Z obsession towards the virtual world and social media had led them apart from the real world. However, they have a global connection among themselves even though they are anonymous to each other. Therefore, this situation had altered the definition of virtues among them and it is no longer bound to the tradition and norm of the community of which they lived.

Based on the previous studies, there are several virtues that are possessed by Generation Z. For example, Stacy Wood (2013) stated that Generation Z only focuses on innovation, the urge for facilities, security and the urge for escapism, running away from reality and focusing on other (usually negative) things to seek calmness rather than facing the problem.

On the other hand, Sipyan Hussin (2017) stated that Generation Z possesses the following virtues:

1. Able to multitask.
2. Dominant in technology.
3. Information is within their close reach.
4. Brave in facing and giving challenges.
5. Independent.
6. Prioritise profession and carrier.

Similar to this, Siti Mahani Muhazir & Naziinda Ismail (2015) stated that Generation Z possesses the virtues of:

1. The urge of wanting speedy information leads to impatience.
2. Did not consider the internet as the most modern tool for humans as they had been using it since they were small.
3. Did not have the capability to do public speeches as their core virtue is privacy.
4. It is obvious that the virtues possessed by Generation Z are way different from the previous generation. These changes are associated with the scientific, technical, culture and economy factors surrounding them, making them socialize in a different manner. The acceptance towards these new virtues and the understanding of their social pattern is tough for the parents, teachers and decision-makers.

Even though Generation Z have or have not possessed a different set of virtues compared to the previous generation, they still need to solve the same problem as the previous generation had in their age. The only significant differences are the use of ICT, social media and smartphones which had been incorporated aggressively (Maria Torocsik, Krisztian Szucs & Daniel Kehl, 2014). This statement indicates that even though Generation Z are skilful in handling ICT, they still need to face the same problem as the previous generation had. Therefore, several things that are not focussed by Generation Z such as moral issues, religion, values, societal norm, unity and patriotism are worried by the current society.

**Interaction and Communication Challenges in Teaching and Learning of Generation Z**

When addressing the concern and issue towards Generation Z, it encompasses the challenges that are faced both by Generation Z and generations before them that currently are dealing with them especially for those who are communicating with them. The Digital Natives era pushes the current society to also use digital technology. Although students nowadays consist of those who were born between 1995 and 2010, older or even younger folks are also influenced by the current lifestyle of which involves the heavy use of digital technology. Teenagers or Generation Z have the tendency to become an agent of change and prefer to do something unique (Mohr & Mohr, 2017; Seemiller & Grace, 2016). The older generation is also included in the current technology trends and even affected by the development of Generation Z lifestyle and at the same time took the chance in learning new knowledge through the digital technology alternative. This is parallel to what Danely (2015) had stated:

"Aging the technoscape means rethinking age through technology while rethinking technology through age"

It is undeniable that conventional teaching and learning is still relevant. However, the education system nowadays also encourages
teaching and learning through online-based media and skills related to computational technology. Based on the study done by Mawar Safei (2017), through deep understanding from the students of Generation Z during classes and quality check on their works, it is observed that students enjoyed teaching and learning through virtual aids more through the passion shown by them in learning things out of their comfort zone. Majority of the students who experience learning from the use of technology produce a good outcome. Teaching and learning through SPeCTRUM, Whatsapp for students in Jabatan Kesenian Melayu and MOOC for the global users indicate that the online-based system gave flexibility towards students and teachers in communicating with no limits of time and place (Mawar Safei, 2017). This indicates that internet technology, with the “on your fingertips” concept, is benefitted by the students and teachers in teaching and learning. The current media and technology enables teaching and learning to be used in such manner; in which was impossible before (Appadurai Dalam Valentine, 2015).

Knowledge and digital technology have managed to change the landscape of human’s life, including the aspect of communication. Even though there are many positive values obtained by the people in using technology (such as fast information services and transforming conventional information presentation to interactive digital format), there are still some issues that are in need of some serious observations, especially in education. Among them, the ministry of education should have provided the schools and colleges with a high-spec computer with the latest multimedia software alongside some camera tools to be used by certain courses so that teaching and learning can obtain the specified objectives. Meanwhile, the mechanism of the hardware should also be exposed to the students in minimizing the damage. As for online teaching and learning, a broader internet bandwidth that can carry heavy files should also be provided so that the teaching and learning are smooth.

A study by Faizah Ja’afar (2017) surveyed Generation Z’s preference of teaching styles. A total of 61% of the students agreed on hands-on activity to be able to make them comprehend the teaching, whereas 47% of them agreed that i-folio increases their interest in the course registered. In addition, 54% of the students also agreed to teaching techniques aside from lecturing. Furthermore, 35% students highly agreed that learning through tutorial and discussion enables them to understand better on the course they undergo, with an addition of 51% of the students agreed to this learning style. Finally, 48% of the Generation Z students agreed that online learning and application mediated learning attracts their interest to the topic taught. Besides this number, the study also noted that off-the-classroom learning has a big potential as one of the most favourite learning styles among Generation Z students. Hence, from this study, it is observable that Generation Z is prone towards their lifestyle trend, in which parallel to Hafiza Abas et. Al. (2017) that shows Generation Z prone to the use of electronic aids in helping them to communicate in teaching and learning.

**Communication Methods in Teaching**
The prior study shows a significant correlation to the study of Thomas & Srinivisan (2016) which shows the tendency of Generation Z to favour games consisting of trial and error. However, this practice of trial and error is highly risky in applying it to entrepreneurship as it involves money and money relates closely to the owner's accountability. Besides, group work does not always work for the introverted students which bring them to a disadvantage of inability to contribute as a team member. This will disable the student to acquire the required skills, especially the challenging one. Through the use of simulation or game, these issues can be minimized because all students will have equal opportunities to lend their hands and contribute to the task.

By adopting Kolb’s Experiential Learning Theory (1984), learning elements should be inclusive of abstract conceptualisation (theory) and followed directly with active experimentation, the practicality. This is because successful communication stems from the dynamic change according to the settings. As the theory is comprehended, it is advisable to apply the theory to practical use. Henceforth, games or business simulation involving multiple functions of business managements are constructed to help in gaining better skills among the school students. This construction of games or simulation will help with Generation Z’s criteria of liking challenges and practicality as mentioned in Thomas & Srinivisan (2016), Cilliers (2017), and Mohr & Mohr (2017). Parallel to what is mentioned by Thomas & Srinivasan (2016), Generation Z are individuals that are cultured to video gaming and video viewing across different smart gadgets since toddlers. Furthermore, this
culture had also influenced these kids and teenagers’ personalities tremendously (Thomas & Srinivisan, 2016).

Business skills might need to be learnt through games that mimic the real-world business and a business course within co-curricular activities are not sufficient. This is due to Thomas & Srinivasan (2016) finding that supports Generation Z as lacking in two aspects: (1) lack of situational awareness and (2) unable to follow or give instructions in normal situations. Generation Z is prone to gaming activities because playing games is their norm. Thus, Generation Z is a group of people who like and are able to learn through trial and error technique. Parallel to that, the learning of entrepreneurship and business through business simulation and games that adds on the element of challenge, complexity level and tasks, will be more efficient towards Generation Z compared to business carnival as being done in generations before. The suggestion to use a more interactive business simulation is concordance to Waver et. al. (2010) and Baričić & Prović (2013) who stated that simulation is a learning mode that complies to the Experiential Learning Theory. This is because simulation will mimic the reality that exists in the real world.

**Conclusion**

The exposure of digital technology and the internet have shaped Generation Z perception, views and thinking skills which is very unique in comparison to the generations before. In terms of the teaching process, this generation highly encourages teachers to use hands-on tasks and discussion. This style of teaching can be done through project-based learning. This style of teaching and learning is also favourable to Generation Z compared to face-to-face teaching style. The face-to-face teaching and learning styles such as lectures, which require students to listen and to note are least favourable by the students. Hands-on teaching and discussion are suited to Generation Z because they want to be involved in being a part of the teaching process. Other than that, Generation Z prefers to be involved in outdoor learning. Outdoor learning will make the process of teaching and learning less formal and can be initiated by themselves. This style of learning is the most favourable to Generation Z. Online learning, ipolio and learning applications are also helpful for their learning process. Generation Z does not favour written tests. They prefer tests to be done orally in assisting them in identifying their weaknesses. They also prefer a formative assessment rather than summative assessment. Thus, in order to communicate with Generation Z, the previous generations should explore in-depth on how they communicate.

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