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STUDENTS' ENGAGEMENT ON THE USE OF TECHNOLOGY IN THE CLASSROOM: A STUDY OF PRIVATE UNIVERSITY STUDENTS IN PETALING JAYA

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ABSTRACT

Technological integration in the classroom has become an important measure for online learning delivery that meets the 21st-century environment. Learning using technology has provided students with different experiences, definitions, and conceptualism. Technology continues to grow to facilitate learning for the students. Thus, this study explored students' views on their engagement while using technology in the classroom. This study employs a qualitative research approach using a case study method to get the data. Interviews were conducted with 17 participants from different levels of study. The participants have been selected by the educators with certain criteria including having experience using technology in the classroom and the ability to express their opinion. They consist of four (4) participants from Foundation Program, seven (7) participants from Bachelor's Degree Program, and the other three (3) from the Master's Degree Program. Semi-structured interview sessions and focus group discussions have been conducted with all participants. The data were then analyzed by transcribing the verbally recorded sources into writing materials, reading the transcribed data to find similar themes, categorizing the themes, arranging the scripts according to specific themes, and selecting the suitable scripts to support the research findings. Findings show that different components of engagements have come into several themes: behaviour, feelings, and cognitive components. Under the behaviour component, participants reported increasing participation, tasks done mostly with a paperless approach and experiencing acts of struggle with using the technology. Participants also reported having less boredom, feeling awkward and still needing the traditional teaching and learning methods. Besides, with technology, participants also experience increasing motivation, persistence in instilling integrity and discipline and feeling easier to understand any learning process. The findings are anticipated to give educators a meaningful significance in diversifying their pedagogical approaches as well as technology selections in teaching and learning.

Keywords: *Technology, Classroom, 21st-century learning, pedagogy*

1.0 INTRODUCTION

Technology has become a vital component in all online classrooms. The importance of instructors integrating and creating these tools may become essential to meeting the various student learning styles (Chen, 2015; Kauffman, 2015; Taylor, 2016).

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Learning is not only limited by four walls of classrooms which place educators as the primary sources for the students. Technology has helped educators and students to be innovative in teaching and learning by engaging with various exciting activities that could help students improve their competence. Besides, the technology could provide opportunities for students to have collaborative work and connect to people easily.

Educators and students nowadays have been exposed to learning assisted by using new technologies such as Moodle and Facebook (Chung & Ackerman, 2015; Gomes, Guerra, Mendes & Rego, 2015), Google Classroom (Iftakhar, 2016) as Learning Management System software. Students also have been experiencing other digital technologies in the classroom to foster learning, such as Kahoot as game-based learning (Dellos, 2015; Johns, 2015; Plump & LaRosa, 2017; Wang & Lieberoth, 2016). Prezi, Glogster, Edmodo, and Toondoo as web-based instructional media provided on the Internet (Asri & Santiana, 2017) in the flipped classroom environment. Many researchers agreed that new technologies create learning opportunities that challenge traditional schools and colleges (Conole, 2016; Flewitt, Messer & Kucirkova, 2015; Gan, Menkhoff & Smith, 2015).

Student engagement is a multifaceted and complex phenomenon to comprehend, but it is crucial in promoting student learning and development (Kahu, 2013). Understanding how students engage with technologies is critical to designing flexible and highly adaptive learning environments that cater to diverse student learning preferences in higher education, rapidly deploying various digital technologies into their learning environments. Furthermore, understanding how students interact with technologies allows educators to provide students with various literacy skills and knowledge to help them learn.

The concept of student engagement is sociological and psychological (Kahu, 2013). Gunuc and Kuzu (2014) defined student engagement as the quality and quantity of students' psychological, cognitive, emotional, and behavioural reactions to the learning process and in-class/out-of-class academic and social activities to achieve successful learning outcomes.

Building on prior research, this study aims to explore students' opinions on preferences of 21st learning equipment in the classroom and students' engagement in using technology in their classroom. Implications of the research findings and suggestions are for improving educators' pedagogical skills and enhancing their teaching approaches to building creative students by using technology in the classroom. The implication also impacts students' learning environment development based on their preferences in integrating technology in the classroom. Before the Internet, the school learning model was where a teacher possessed the knowledge on a topic and disseminated it to pupils. A teacher would read from a book or write on the blackboard so pupils could copy it. It was the only way of sharing information that had worked wonders for them.

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However, with the Internet as a great source of information, what students learn and how they learn have to change dramatically. The environment in which they learn cannot remain the same as in classrooms with tables and chairs arranged in rows, so pupils face a teacher and a blackboard. Appropriately using ICT in education, such as the Internet, helps meet these new challenges by offering opportunities for better quality and efficiency.

Changing the environment, where they cannot function the same way as they used to, helps educators and pupils break free from old habits. As Deputy Education Minister Datuk P. Kamalanathan, during Celebrating Classrooms — Inspiring 21st Century Learning Conference attended by educators last week, said: "You need to be ready to be the change, and change begins with you." (New Straits Times, June 7, 2017)

Research also questions the value of technology usage in the classroom. Arguments on technology use in the classroom have been debated when some researchers have said that technology does not improve students' learning (Coughan, 2015; Drijvers, 2015). Technology can increase cognitive load, which reduces understanding, has a steep initial learning curve, and requires effort to remain up to date. Despite significant research in educational technology, there is still much we do not fully understand about students' experiences with technology.

However, much research indicates that students' engagement does not rely on technology per se but the pedagogical potential, the role of the teacher, and the educational context (Drijvers, 2015; Heitink, Voogt, Verplanken, Braak & Fisser, 2016). In addition, marketing professors are using various educational technology tools to assist learning in their classes. Thus, it is vital to know the students' perceptions of how these unique teaching tools influence their overall experience.

1.1 Research Objective

The main objective of this research is to explore students' views on their engagement using technology in the classroom. The research findings are anticipated to give educators a meaningful clue to diversifying their pedagogical approaches. The implication also impacts students' learning environment development based on their preferences in integrating technology in the classroom.

1.2 Research Question

What are the components of students' engagement when using technology in a classroom?

2.0 LITERATURE REVIEW

Books, blackboards, pictures, overhead projectors, and cinematographs are formerly used for the educational environment, and with technology, it has shown up with different dimensions. The tools are used ideally and have improved even more with the entrance of computers and

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interactive boards into educational environments. Multimedia has been created by combining visual elements and audial elements. Thus, the existence of technology in the classroom environment has started to increase.

In recent years, technology can benefit students in the learning process as the education system has changed rapidly with the development of learning technologies. The flipped classroom, google classroom, and flash notes are examples of modern classroom technology that can enhance students' motivation to keep active in learning. Technology usage in the classroom has created an enjoyable environment for educators and students to have fun during lecture sessions. Research conducted by Thomas (2018) stated that new and innovative possibilities and pedagogies such as the Flipped classroom approach and group work rendered the class more active, making the work meaningful and contributing to the enjoyment of learning.

Educators should emphasize technology sources in delivering knowledge to help students grasp learning concepts easily. Technology development such as digital cameras, computers, and educational applications makes lecture sessions more fun and enjoyable for students through the visual explanation concept. Digital teaching platforms provide teaching materials emphasizing media pictures, sound, or images to generate more attractive and interactive functions like chat rooms and two-way communication discussions between students and instructors.

2.1 Personal feelings about using technology in the classroom

Research done by Raja and Nagasubramani (2018) has shown that top institutions worldwide encourage the learning process to become more interactive and exciting by relying on PowerPoint presentations and projections. The research stated that students enjoyed and were attracted by seeing appealing visuals which can level up their interaction, interest, and motivation in the learning process rather than just reading words. Hence, technology usage in the classroom has given enjoyable and interactive impacts on students in their learning process.

Nowadays, the educational environment is moving to use mobile phones too. Kahoot is one of the applications that can be used by using a mobile phone. Kahoot has become a tool that could allow an educator to be creative in creating individualized quizzes, enabling students to work collaboratively and encouraging them to create their quizzes. Students referred to Kahoot! as a unique lecture experience that is enjoyable and stimulating to learning. Compared to engagement in other lectures, students mentioned that learning with Kahoot! was a rewarding lecture experience that is captivating and desirable. (Licorish, Owen, Daniel & George, 2018).

Radhika (2019) believes that learning styles can be done in various forms, such as reading articles, typing assignments, using Power Points to prepare presentations, using Excel to prepare spreadsheets, etc. The students could play games and use technology for leisure and recreational purposes. Besides, the teaching method can also impact students' engagement in-

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class activities. Application technology in the learning process has encouraged students to be more active and feel less boring during lecture sessions.

With technology, learning can take place in various forms. These are reading articles, typing assignments, using PowerPoints to prepare presentations, and using Excel to prepare spreadsheets. Individuals too can play games and use technology for leisure and recreational purposes.

2.2 Reactions when using technology in the classroom

Using mobile applications in learning lessons can facilitate students to solve problems efficiently, enhancing their motivation to study. Research conducted by Wu (2015) reveals that mobile application use in English language lessons helps students search for more words or vocabulary consistently daily. The result indicates that students using mobile apps can retain more words and phrases than those who search manually. They feel more confident in completing any task given by educators as they can access the sources quickly. Their enthusiasm and discipline in their study have also increased.

In a classroom setting, Padlet works well with activities such as brainstorming, discussion, and project work. Padlet provides a platform for students to engage in learning and sharing ideas. Munirah, Melor, and Jamaluddin (2017) found that students at University Sains Islam Malaysia (USIM) showed a high preference and a positive attitude toward using Padlet to learn grammar.

Using technology as instructional media has produced a better student learning experience. The media technologies such as Prezi and Edmodo have increased the students' motivation to study. Asri & Santina (2017) found that school students in Jawa Barat, Indonesia responded that the Prezi presentation enhanced the students' motivation to study. They focus enthusiastically on what the teacher explained in the classroom. Besides, the usage of Edmodo allowed the educators and students to have collaborative learning with each other.

Smartphones or computers encourage a green learning environment by saving paper usage as they can easily store information and download lecture notes without needing to print out the slides (Muhammad et al., 2017). Thomas (2018) agreed that paperless classrooms could be considered as eco-friendly as it helps to conserve nature by saving trees from which paper is made. Technology usage can also reduce teaching and learning costs among educators and students. Students can download learning materials or send assignments online without spending more money to print the works. This also can reduce the usage of paper in the learning process. According to Ming et al. (2017), using teaching materials made by instructors has allowed students to use digital files several times and learn repeatedly.

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Recently, the smartphone has become one of the suitable devices in the education system as it

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is very convenient to bring anywhere and thus can encourage students to download or upload digital learning materials anytime or anywhere, they want. Just by touch, students can easily get access to the content that is related to their studies. Several studies also have positive opinions on the concept of MLearning (Mobile Learning) where the mobility of the usage has been an important indicator for the student's learning (Al-Emran, Mezhuyev & Kamaludin, 2021; Gupta, Khan & Agarwal, 2021; Pham, Nguyen & Le, 2021). Compared to traditional learning, digital learning allows students to choose suitable times and locations for online lessons without being pressured and restricted through the instructors' online interaction mechanism. Technology devices in lecture sessions, too, can help students record videos or capture images related to the lesson for convenience use as a reference. This can encourage students' motivation to learn whenever or wherever they want to study. In their study, Raja and Nagasubramani (2018, state that the use of the Internet allows students to find various kinds of help, tutorials, and other kinds of assisting material that could be used to improve and enhance their learning academically. The instructors and students could acquire data simply by searching keywords through internet usage as it covers rich and diverse information beyond teaching materials in the curriculum.
Students produced a reasonable effort towards assignments by making a creative and efficient presentation in the classroom. This has positively impacted the learning environment, resulting in good bonding between students, educators, and their classmates.

Although most students have been exposed to technology in their daily routine, educators and students still lack experience using technology in the classroom. For beginners, they will feel awkward and not comfortable integrating technology into their studies as they used to use the traditional method of learning during their schooling sessions. Even though most of the students at universities commonly use technology and are described as tech-savvy, internet-savvy, or computer-savvy, there is still no guarantee that they all have adequate skills to cope with the current digital learning environment.

A study by Ungura et al. (2018) showed that most incoming first-year students at the University of Rwanda experienced less with e-learning. The result indicates that a substantial proportion of respondents from education (70%) and Science, Technology, Engineering, and Mathematics (STEM - 54%) never used e-learning systems for educational purposes. Therefore, for those subsets, it is not possible to know their experience with the online learning environment as they have never had such exposure. The findings show that most students face difficulties using e-learning platforms due to a lack of exposure to the system during secondary school. The researcher concluded that first-year students are not described as tech-savvy and in low-level readiness usage of learning technology.
The teaching and learning process is now repositioning when the digital revolution arrives, which shows the capabilities to promote effective learning and enhance the student learning experience for the betterment. The educational landscape has expanded by encouraging students to exchange ideas, explore new knowledge, co-construct new meanings, and generate

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mutual understanding between students and the materials that they are using (Vygotsky, 1978; Chisanu, Sumalee, Issara & Charuni, 2012; Harris, Jones & Baba, 2013).

Bruner, who coined the term 'scaffolding', claimed it as a metaphor to explain the type of assistance used by an educator or more competent people to help in the learning process. Vygotsky believed that when a student is at the Zone of Proximal Development (ZPD) to perform a particular task, it will provide appropriate assistance (scaffolding) for the student to perform the task at the maximum level. Thus, in scaffolding, an educator tends to help students learn a concept or gradually execute a task independently. Once the student has mastered the task, the scaffolding could be removed so they can complete the given assignments independently. Therefore, in using technology in the classroom, educators are said to use the techniques of scaffolding to assist and boost the students' potential to gradually perform a task on their own.

In this study, the researchers aim to find out categories of students' engagement when using technology in the classroom. Kahu (2013) and Zepke (2014) stated that the degree to which students actively participate in learning activities is referred to as behavioural engagement Indicators of behavioural engagement will be based on students' actions on the quantity and quality of effort put towards learning. Kahu (2013), Lam et al. (2102), and Lester (2013) indicate that time and effort spent participating in learning activities and while Kahu (2013) claimed interaction with peers, faculty, and staff are indicators of behavioural engagement (Kahu, 2013).

In the affective components, students' affective reactions to learning are referred to as emotional engagement (Lester, 2013). Attitudes, interests, and values toward learning are indicators of emotional engagement, as is a perceived sense of belonging within a learning community (Kahu, 2013; Lester, 2013; Wimpenny & Savin-Baden, 2013). Self-report measures are frequently used to assess emotional engagement, which provides insight into how students feel about a particular topic, delivery method, or instructor.

Finally, cognitive engagement refers to how much time and effort students put into learning to comprehend and master content (Lester, 2013). Indicators of cognitive engagement include motivation to learn (Lester, 2013), persistence in overcoming academic challenges and meeting/exceeding requirements, and deep processing of information (Lam et al., 2012) through critical thinking (Witkowski & Cornell, 2015). (Lester, 2013).

3. METHODOLOGY

A qualitative research approach using the case study method has been employed to explore and answer all research questions. The research participants are 17 UNITAR students taking subjects related to technology and education in the classroom. These participants have been

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selected by the educators with the criteria of having experience using technology in the classroom and the ability to express their opinion. *The participants have been selected by the educators with certain criteria including having experience using technology in the classroom and the ability to express their opinion.* From the 17 participants, four (4) are taking Foundation Program, seven (7) are taking Bachelor's Degree Program, while the other three (3) are taking Masters Program.

Table 3.1

Participant	Gender	Age	Academic Level
Ms. A	Female	18	Foundation
Ms. H	Female	18	Foundation
Mr. K	Male	19	Foundation
Mr. A	Male	19	Foundation
Mr. F	Male	21	Degree
Ms. C	Female	21	Degree
Ms. L	Female	22	Degree
Ms. V	Female	21	Degree
Ms. S	Female	22	Degree
Mr. M	Male	22	Degree
Ms. Y	Female	21	Degree
Mr. J	Male	32	Master
Mrs. F	Female	34	Master
Mr. M	Male	35	Master

A semi-structured interview session and focus group discussion has been conducted for all participants. Two experts specializing in Technology and Education have validated the interview questions.

Data collection and analysis procedure

The data has been collected by asking permission from the selected lecturers to select a few students who have experience using technology in the classroom and are available to give an opinion. Two layers of individual interview sessions have been conducted to reach the saturation point. The focus group discussion was selected among the Foundation students to spark ideas who are still new in delivering opinions and experiences to other people. Interviews ranged from 25 minutes to 1 hour. The statements of the individuals interviewed were repeated, and participants' confirmation was obtained again.

The data were then analyzed by transcribing the verbally recorded sources into writing materials, reading the transcribed data to find similar themes, categorizing the themes, arranging the scripts according to specific themes, and selecting suitable scripts to support the research findings. The data obtained from the interviews were coded according to behaviour,

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feelings, and cognitive themes. Then, the subthemes were created as the following figure.

The themes of behaviour, feelings, and cognition are based on the studies done by previous researchers. Behavioural engagement is when students actively participate in the learning activities. Feelings engagement refers to the emotional reactions, such as attitudes, interests, values, and sense of belonging within a learning community. In contrast, cognitive engagement is based on the time and effort students put into learning to understand and master the content, being motivated to learn and being persistent in processing the information.

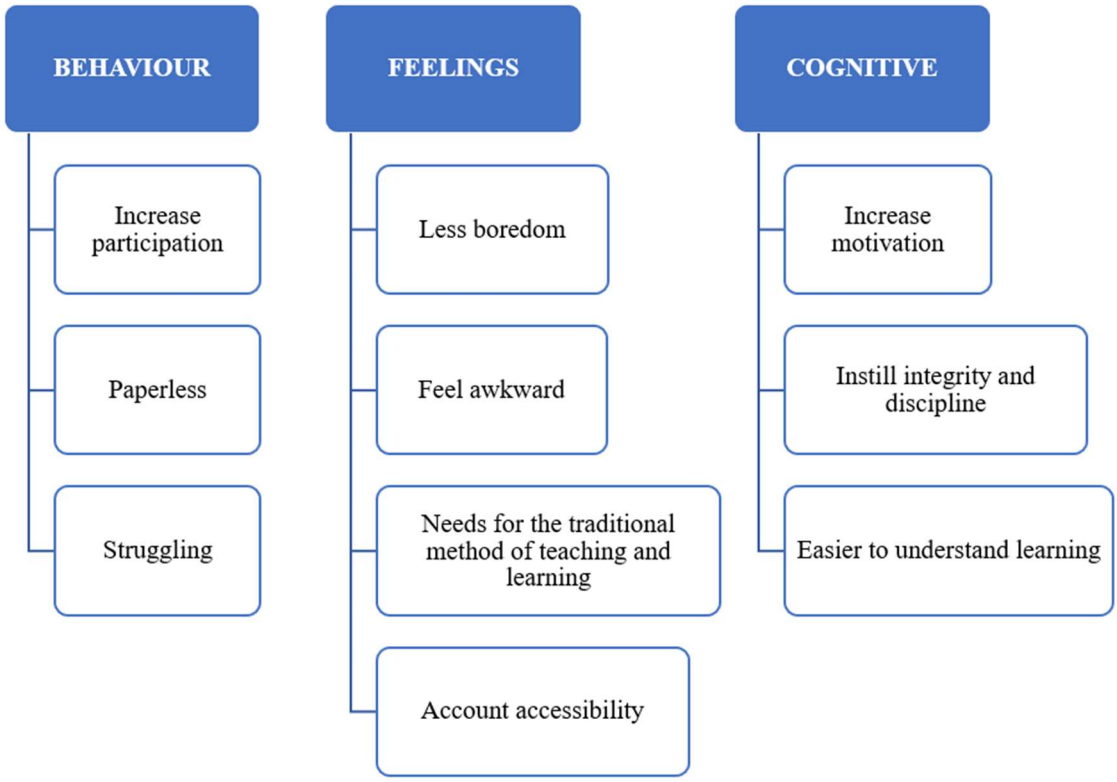

Figure 1: Themes and subthemes of students using technology in the classroom

4. FINDINGS

4.1 Behavioural reactions of students using technology in the classroom

Based on the results, the participants viewed using technologies in the classroom have increased their participation in learning and being more convenient in studying since less time and effort

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are needed. However, on the other hand, some students still struggle to adapt to using technology in the classroom.

4.1.1 Increase participation

The participants claimed that using technology helped them to participate more by sharing points, reflecting on experiences, and engaging with their teammates and lecturers through interactive approaches such as showing pictures and videos while teaching. The following verbatim demonstrated the participants responses on the increment of their participation.

"Padlet helps us to improve our knowledge as it makes us share our points also" (Ms. V, Degree, 21)

"Ohhh. Kahoot got lah. For now, we use Kahoot lah…when Madam A wanted to make a test, we just used Kahoot, and Ummm... it really makes the learning process even more fun and interactive. We can simply recall many things we have learned. It is fun... (Ms. H, Foundation, 18)

"I believe that I am so engaged and collaborated with my teammates when the lecturer started to have interactive elements, especially during assessment in the class. As we are having a long day class, and this has helped a lot" (Mr. J, Master, 32)

"Yeah, I am a visual learner and auditory learner. I need to see and listen. Only talking will make me lose interest. Nowadays, we have a link to know (what is going on with) this world, so we just use our phones. When we get bored, we take out our phone" (Ms. A, Foundation, 18)

"So, if the teacher played any video and she showed any pictures, the students would get attracted with the videos and the picture. They will give more cooperation" (Ms. S, Degree, 22)

4.1.2 Paperless

Paperless classrooms by using technology give benefits to the educators and students in various types of aspects. For example, using the system in the teaching and learning approach in UNITAR has made them accessible, saved costs on paper, and made the studying tasks easier. The submission of the assignments could only be sent via the learning management system provided without putting much effort into printing them out.

"Then, one of the disciplines is we could save paper usage. With that technology, we do not need those things (the papers). For example, by using UNIEC Virtual, we could find the notes in the system if we left the notes". (Mr. K, Foundation, 19)

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"I think the usage of UNIEC Virtual is beneficial, and everyone has to assess the UNIEC Virtual or UNIEC Campus to know their profile, updates, finance (financial status), and the homework, assignment, and forum. Basically, it is very useful and, like he says, very unique". (Mr. A, Foundation, 18)

"So, to me, technology is very convenient, which is very good, which saves paper also in doing homework and quizzes. Before, we were given papers to do homework but now, except for examinations (we cannot do online). Other than that, we can do something online like a forum or online exercise. Maybe assignment also online no need to print and save much money and in printing side" (Mr. M, Degree, 22)

"When we have the technology (with the Internet), it makes us less direct to go to the library. We can just use google to find out some information. Now, we need less energy to go to the library, save time and less cost needed also" (Mr. F, Degree, 21)

"It does make the job easier and lot of faster, so I really support using technology using... in education…" (Ms. H, Foundation, 18)

The participants found that integrating paperless in the education system will reduce paper consumption and support an eco-friendly environment. Less paper use could save environmental problems such as global warming, air pollution, and ozone layer depletion.

4.1.3 Struggling

Many students nowadays can adapt to technology development in the learning process. The students who grow up in the modern era have been exposed to technology from an early age. However, some are still struggling in adapting to the new technology, especially in the use of technical jargon and the lag of Wi-Fi connection.

"Honestly, it should be started in school because compared to him and me, I do not have the resources at his school, so I am still behind on the term and all that. I am struggling a little bit if I were to start since form 1..... I will be a pro..... Yeah" (Mr. A, Foundation, 18)

"Did not understand if the point with less explanation like Prezi, good application but sometimes difficult to understand the link between one point to another point" (Ms Y, Degree, 25 December 2018)

***"**There is the only problem, even when we do the Edmodo project in a technology project just now. Everything is wonderful, I really like it, but then the problem is I need Wi-Fi to upload all the notes, all the assignment and everything so when there is no Wi-Fi it like we very angry at that time" (Mr. M, Degree, 22)*

"Yes, there is …. sometimes when we do not have an internet connection, some can

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participate in the game (Kahoot), but we can't… so we just see others participate (frustrated mode)" (Ms H, Foundation, 18 December 2018)

4.2 Feelings components when using technology in the classroom

From the feeling component, participants reported feeling less bored in the learning process while using technology. However, some students claimed to have an awkward feeling with the technology, still need the traditional method of teaching and learning, and feel distracted from accessing more information with the imposition of subscription fees.

4.2.1 Less Boredom

The participants also stated that technology makes them less bored, especially visual students. The visual students claimed that only the talking approach made them lose focus and less attracted to the lesson. Using animation, video, and songs has added to the remembrance of the participants in the lessons.

"What can we do, what is the next step? Because people around us nowadays most of them are visual students, if you just use verbal, he might lose his concentration and will get bored" (Mr. A, Foundation, 18)

"Learning is boring when we use only traditional classrooms. We have to have some sort of technology, for example, video. If use more like Kahoot or quiz, they make us less bored in class" (Ms. V, Degree, 21)

"Whiteboard, whiteboard, whiteboard, but once go for technology, she goes for sway, animation, video, songs. How to solve the question, cartoon-cartoon a bit, it is like okay" (Ms. C, Degree, 21
"*Well, if you believe technology can facilitate learning, this is true. Technology can get rid of the boredom among students in the class." (Mrs. F, Master, 34)*

In the 21st century, a traditional teaching method such as listening to the educator's talks is not practical to bring an energetic lesson. Students tend to lose their attention and easily feel bored in this situation. Technology usage in education, especially in the classroom, can help educators improve their pedagogies in conveying lessons in more interactive ways.

4.2.2 Feeling Awkward

Although technology has benefited the users in many aspects, particularly in the education line, few participants initially felt that technology made them feel weird. They feel shy if their classmates find that they are unfamiliar with the software or applications used in the classroom. The existence of the interactive projector also made them curious to try it on. However, the feeling of awkwardness does not last long. They feel at ease after several trials then.

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"I am a little frustrated with what I understand because we feel so awkward when it is new to us. Nowadays, everyone knows all the basic things .... If we do not know the basic terms, we get frustrated." (Mr. K, Foundation, 19)

"At the beginning, I felt awkward when the lecturer used the new application, for example, Kahoot (at first). Later we are ok." (Mr. A, Foundation, 18)

"When I first saw the interactive projector in UNIEC Space, I felt curious and awkward. We can just doodle on the wall, no need to use the whiteboard as used in school" (Ms. H, Foundation, 18)

4.2.3 The Need for Traditional Method of Teaching and Learning

With the rapid development of technology nowadays, participants found that the old study style with physical books is still needed. They need it as their reference and claim that the use of e-books is only helping them when in dire need.

"Effective too, but it is not so effective as face to face directly. The technology is like an assistant that could help us to ease our work, but we need a human touch too" (Mr. F, Degree, 21)

"I cannot say it is (technology) is a must, but for me, I cannot rely on technology 100%. I still want to go to using books because for me e-books it is really helping me, so I need to go using the old style lah" (Ms. H, Foundation, 18)

4.2.4 Account accessibility

With the vast applications developers developed in technology nowadays, this has given a chance for them to gain money. However, the users, particularly students, feel a bit burdened by the subscription fees imposed on them. They could not afford to pay the fees, so they would only have to use any software in trial mode.

"And we have another problem. Apps (applications) we do need to pay for the apps (applications). Sometimes we do not want to pay, but if we really use them a lot, we will have to buy them. It is not in ringgit, but they are in dollars" (Ms. Y, Degree, 21)

"*One more problem with technology is that if you want to use Padlet, you can only use it three times (for free). Other than that, we have to pay so. The payment makes me frustrated, and other than that is fine. Certain tools (applications), we need to pay, we need to buy (subscribe)" (Mr. M, Degree, 22)*

4.3 Cognitive concerns when using technology in the classroom

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In terms of cognition, participants asserted that when using technology, their motivation increased. Technology also made them persistent in being more ethical, integrity, and disciplined, and made them easier to understand the learning.

4.3.1 Increase motivation

The participants found that the interactive tools and applications used in the classroom, such as the interactive projector, the usage of music and video while teaching and learning, and the use of Padlet and Kahoot software, have made them feel fun, enjoy and more interested in learning and recalling any teaching matters been taught by the educators.

"It is really fun... I enjoy every movement in class. Besides, using technology has made me sharpen my skills. I feel becoming more innovative." (Ms. A Foundation,18)

"The Level 9 facilities make us interested in studying. The projector is so fun and interactive" (Mr. F, Degree, 21)

"First of all, of course, the one with technology is much more interesting and more colourful to us. In terms of music, video compared to the one who just traditional teaching it might be quite boring but of course, that teacher is an interesting one it might make us interesting too" (Ms. C, Degree, 21)

"So, if like it should play a song about certain topics so next time, we think about the song we like ahh, I know that topic, I remember the thing you thought us" (Ms. L, Degree, 22)

4.3.2 Instill Integrity and Discipline

Another experience claimed by the participants is having integrity and discipline. To them, technology has moulded them to be disciplined and taught them to show integrity in themselves as humans. Participants felt that integrating technology in the classroom can develop student discipline attitudes in study and learning.

"To me, we need technology as it makes us more disciplined. For example, we have the UNIEC Virtual platform. In UNIEC Virtual, we have to do a quiz based on the dateline. So, those who late will be considered of giving no excuse and cannot persuade the lecturer anymore" (Mr. K, Foundation, 19)

"For me, Uhhhhhhhhh…. Ash says we need to balance everything (whether) having a normal class (normal lectures) and (or) using technology during class but having that also means that we need to use it wisely not only in class but also outside of class. We have to show our integrity of using this kind of technology in our daily

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life" (Mr. A, Foundation, 18)

4.3.3 Easier to understand learning

Technology's implication in education makes learning more convenient and easier for the students. The use of technology makes them save energy to go to the physical library. They can just browse any information through the Internet. The use of Padlet, for example, also made it easy to browse through all answers presented by other users in the classroom. This will make it easier for them to write reflections on the lessons they have learned previously.

"Example, it is necessary to use it in IT class, but like for Fundamental of management and our business classes, the most important thing is understanding our material but the way when you learn, you absorb, you understand, and you contribute, when you use the technology the communication process becomes easier....." (Mr. A, Foundation, 18)

"(Using) Padlet, we can. In the class I presented just now, I used Padlet for students to write the reflection about what we have learned in the classroom. If using WhatsApp, we have to scroll the page, but with Padlet, when we open, everything is there" (Mr. M, Degree, 22)

***"**Let us say that my lecture posts any question in Padlet. So, if it is in a private name, we cannot see it. We cannot see our friends' answers. However, then in Padlet, we can see their answer also. In the same forum also, we can see other people's answers. We can get to know okay… so this answer should, this answer should, this answer is correct". (Ms. Y, Degree, 21)*

"Mmm...Can you imagine how we present the handwritten document we have done in the classroom to be projected on the screen? You cannot go to the front to see what your members are presenting, is it? So good thing about presenting it effectively, we use the visualizer to make everyone able to see what is being presented". (Mr. J, Master, 32)

5. DISCUSSION

The findings found in this paper have shown various components on students' engagement with digital technologies.

From the behavioural reactions, the participants found that the classroom interactive tools and applications have made them feel fun, enjoy, being more interested and increased their participation in learning and recalling any teaching matters taught by the educators.

This has been discussed by prominent scholars on the interactive technology application,

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whereby digital technology promotes student engagement. Thus, it provides a fun yet meaningful experience to the students (Muhridza, Rosli, Sirri & Samad, 2018; Senel & Akman (2016) has also stressed that educational games encourage many students to sustain their interest and work. As digital natives, they are eager to explore through any multimedia-based education comprising text, audio, and visual to promote cognitive processes during teaching and learning activities.

By using technology, paperless classrooms have also benefited educators and students in various aspects. For example, using the system in the teaching and learning approach in UNITAR has made them accessible and saved costs on paper. The submission of the assignments could only be sent via the learning system provided without putting much effort into printing them out. In recent years, many schools have been moving towards a "paperless classroom" policy, in which teachers and students use computers as an alternative to notebooks and textbooks to be electronically both in and out of class (Shonfeld & Meishar-Tal, 2017). This paperless classroom has effectively prepared the students for future learning efficiency, especially in integrating the students with all the senses.

The participants also stated that using technology makes them less bored, especially among the visual students. The visual students claimed that only the talking approach made them lose focus and less attracted to the lesson. Using animation, video, and songs have added to the remembrance of the participants in the lessons. Technology is seductive when what it offers meets our human vulnerabilities. Research about the implication of adapting movies, songs, and game pedagogies has been done at Taiwan University, and they discussed the cognitive consequences of these elements in the classroom. Findings indicated that affective domain and emotional factors substantially impact learning. These can be associated with the theory of Cognitive Information Processing (Lin, 2020). Qin, Zheng, and Wang (2019) have also found that educational technologies with multimedia can produce a positive academic environment. The application's interaction will lead to an emotional increment, which can be achieved by integrating technology in the classroom. This is significantly proven that multimedia encourages less boredom among students.

Although technology has benefited the users in many aspects, particularly in the education line, few participants initially felt that technology made them feel weird. They feel shy if their classmates find that they are unfamiliar with the software or applications used in the classroom. The existence of the interactive projector also made them curious to try it on. However, the feeling of awkwardness does not last long. They feel at ease after several trials then. In line with what has been presented by Durnali (2020), teachers or students avoid using the updated technological application because they are not exposed to the tools. Students might get less exposure when the teachers or lecturers use it in the classroom. Hence, awkwardness, inferiority, and shyness are part of the contributing factors to their perceptiveness in using technology in the classroom.

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With the rapid development of technology nowadays, participants found that the old study style with physical books is still needed. They need it as their reference and claim that the use of e-books is only helping them when in dire need. Indeed, higher institutions are most commonly moving forward with the digitalization of teaching and learning. Some are using blended, some are using fully digital in teaching and learning, and still, some are using traditional ways of teaching. These all methods in the educational process have their strength in delivering knowledge. However, Szadziewska and Kujawski (2017) have found that the preferences of having a traditional way of teaching and learning were influenced by the insufficient materials uploaded, user-friendly interface, low creativity in searching for knowledge, and less direct communication with other team members.

This has also been agreed by Graham (2019) in that the role of the instructor in higher education is changing. The roles of online instructors may be more complex than traditional instructors. Hence the technology pedagogical knowledge has to be one of the important elements in delivering knowledge in a new technological environment.
With the vast applications developers developed in technology nowadays, this has given a chance for them to gain money. However, the users, particularly students, feel a bit burdened by the subscription fees imposed on them. They could not afford to pay the fees, so they would only have to use any software in the trial mode. Account accessibility, especially digital tool accounts that require subscription fees, has disallowed the students to have further exploration related to teaching and learning, and this has impacted the eagerness to learn. Researchers believe that understanding students' feelings and experiences might lead to a more significant platform for providing excellent knowledge to the students.

Another experience claimed by the participants is instilling their motivation and giving them more integrity and discipline. To them, technology has moulded them to be disciplined and taught them to show integrity in themselves as humans. Participants felt that integrating technology in the classroom can develop student discipline in studying and learning. Parallel to the findings by Stoesz and Yudintseva (2018), few studies provided evidence that educational interventions such as technology integration changed student behaviour or outcomes outside the context of the intervention. Research has also been done among Midwestern University students in the United States, and the findings show that academic integrity and attitudes can be improved using an online intervention (Cronan, McHaney, Douglas & Mullins, 2017).

Educational technology has also begun to change the roles of teachers and students. In many ways, teachers facilitated by technology have created new ways for the students to learn. The system and mechanism embedded in the digital application have changed and improved people's attitudes in a disciplined way.

Technology's implication in education also makes learning more convenient and easier for students and educators. The use of technology makes them save energy on going to the physical

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library. They can just browse any information through the Internet. The use of Padlet, for example, also made it easy to browse through all answers presented by other users in the classroom. This will make it easier for them to write reflections on the lessons they have learned previously. Additionally, Unser (2017) has also agreed that the technology has allowed the students to deliver the content more quickly, access completed homework assignments, and monitor progress in real-time. These have effectively proven that integrating technologies might ease how they deliver the learning materials and curriculum for teachers and students.

Although each of the three aspects of engagement can be considered distinct, there is considerable overlap. For example, Filsecker and Kerres (2014) indicated that the behavioural part of the engagement that includes exerting effort and attention could be regarded as cognitive engagement. Understanding the three dimensions has provided a more detailed picture of students' engagement in the use of technology in the classroom.

6. CONCLUSION & RECOMMENDATION

Although some students are still keen to have a physical textbook in hand, they still struggle to follow the technology pace and face the limited time use in some educational applications. However, technology has added to the value of learning among them. As students nowadays are exposed to the vast tools and applications in educational technology, it is encouraged that educators be acquainted with this technological life to answer students' learning preferences and expectations.

In the era of the 21st century, students are seen to be more comfortable using technology in the classroom, as it can boost their vibes and energy during class. This eventually could increase their understanding of the course compared to only using the traditional way of teaching. With the countless online resources, technology can help to improve teaching. Educators can use different applications or trusted online resources to enhance the traditional ways of teaching and to keep students more engaged. This valuable time can be used for working with students who are struggling. Besides, having virtual learning environments in the classroom also enhances collaboration and knowledge sharing between educators.

As technology is used increasingly in both educational institutions and the workplace, students must learn how to use different digital applications. Adding technology to the curriculum helps students improve their skills and do well in school and prepares them for real when they leave school. Although educational technology makes learning more student-centered and less teacher-centered, it is still crucial for educators to think carefully about how to use it. Since there are a variety of technological applications, each with its unique features, it is essential for educators to help students learn about these technologies to avoid becoming confused. Educators should also keep giving students feedback as they engage with technology.

Hence, educators should consider that learning through technology and technological devices may facilitate this new generation. It is recommended that all educators undergo training in

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using technological devices (in the classroom) and educational technology applications to add and increase knowledge and skills in the pedagogical approach of the 21st-century teaching and learning process.

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