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Evaluation of Digital Literacy to Educating Post-Millennials

Jennifer H. Operio[1]
[1] Holy Angel University, Philippines

Abstract

This paper is meant to evaluate the usefulness of digital literacy to learners who are classified as post-millennials. It strived to explore a possible retooling of education through innovative strategies to be able to increase value in classroom learning. Utilizing information and technology in communication to search, create, analyze and relay messages which requires cognitive and technical skills, is known as digital literacy. Post-millennials are those born from 1997 onwards. Since their generations are into the maximum use of the internet and technology in communication, the author deemed it necessary to evaluate the digital literacy of the post-millennials in a private school in one of the provinces in the Philippines. The respondents are the administrators, non-teaching staff, teaching staff, and students of this respondent school. The author utilized survey questionnaires to collect data from the participants. Results showed that less than half of the educators who participated favored digital teaching to students. However, this is not the case for learners because they all voted for digital learning. They mentioned that using digital tools is flexible, and they were more favorable in its integration into their classroom learning. The author, based on the findings, concluded that this present generation is more inclined to digital learning and teaching approaches. The author recommends that further and additional research is needed to determine more productive strategies for the provision of internet connection in schools and physical classrooms of the country.

Keywords: *Digital Literacy; Post-Millennials; Synchronous; Asynchronous; "Genyo"*

INTRODUCTION

According to UNESCO (2022), education is a basic human right, and digital literacy and technology have become a social necessity in the midst of crises and conflicts. The study by Sacramento, Ibanez, and Magayon (2021) states that to be able to accommodate the diverse needs of the learners, technological adaptation of both teachers and learners is necessary. Filipinos, as reported by the Philippine Institute for Development Study (2021), have limited digital literacy skills. The National Economic Development Authority, or NEDA of the Philippines (2011), reported that the country, as compared to other countries in South East Asia, particularly the country of Singapore, has been faring way behind. Unlike other national governments in the region, the Philippine government tends to limit the budget designed for education and technology. Only private schools that are not funded by the government can actually rise above this dilemma in the Philippine education system. The worldwide challenges brought about by the COVID-19 pandemic aggravated the situation and existing issues in the Philippine education system (UNESCO, 2021). It is in this regard that the Philippine government is addressing the needs and helping its citizens to understand various technology-related policies, initiatives, and services (Umali, 2019). This

Corresponding author
Jennifer H. Operio, joperio@hau.edu.ph Faculty of Teacher Training and Education Universitas Terbuka and
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research looked into the current situation in a private school in Pampanga Province regarding its digital implementation in all its courses. The author aimed to prove that digital literacy is necessary to be integrated into the academic curriculum at the basic education level to be able to emphasize the value of education and technology.

Digital literacy means using information and technologies in communication to be able to search, create, analyze and relay information which requires cognitive and technical skills (Loewus, 2016). Sieva Kozinsky (2017) mentioned that post-millennials believe there is a connection between academic and personal experiences using the same tools. He stated that they are not keen on being physically present in the classroom and taking notes while the lecture is going on and preparing for the long examination. As per their expectation, they want to be fully engaged and become enjoined in the learning process. They are completely comfortable learning with other students even outside of the physical classroom and utilizing social media platforms. For them, studying is not just limited to the four corners of the classroom; it is something that takes place at anytime and anywhere. Over the past ten years, there has been increasing use of the digital approach in teaching and learning, which integrates technologies with traditional teaching methods. This approach requires the physical presence of both learner and tutor, but there is a component of authority over location, schedule, and track or pace by the student (Smyth et al., 2012). This new instructional approach is not just about increasing the units of computers inside classrooms; in the majority of cases, it shows a basic transformation in how educators and learners expect the studying experience. In a consensus among the innovators of education by the name of Biggs and Tang (2011), the digital teaching method has three parts. (i) "actual classroom activities assisted by a qualified and well-trained teacher"; (ii) "educational materials are uploaded online by that same teacher; (iii) "self-faced study time guided by the online resources, while the expected skills developed in the classroom setup."

This research is meant to evaluate the usefulness of digital literacy to learners. It attempted to look into possible retooling of education through innovative strategies to be able to increase value in classroom learning. Specific answers were searched for: (1) Is there evidence of digital literacy in the subject respondent's school? (2)What are the specific drawbacks of digital literacy? (3) What level of productivity is evident in the learners' engagement in digital literacy? (4) What is the level of general fulfillment of educators in digital literacy? (5) What is the most compelling feature of digital literacy? (6) What is the least compelling feature of digital literacy?

LITERATURE REVIEW

In 2011, Biggs mentioned that by studying through guided and standard activities, digital learning was most likely other educational institutions and organizations coined as combined training. Trainers, in training, can transition from delivering knowledge to its actual manifestation, helping industries to reduce costs in transporting them worldwide to oversee these training events and activities (Biggs, 2011). Digital literacy is a form of imparting knowledge where students complete their tasks independently, and resources are provided electronically through a given platform, say a learning management system. It works best for those individual learners allowing them flexibility and freedom in their day-to-day routines. According to Marlatt (2018), this approach is now so popular that the number of participants has already increased to about 15%. The evolution of technology makes traditional learning more fun and exciting.

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Biggs states that by giving emphasis on studying through guided and standard activities, the digitalized approach of learning proved as more inclined to what some institutions and organizations are coining as crossbred training. Through this approach, trainers can transfer their focus from the knowledge delivery to its actual manifestation, and organizations incur less cost in transporting their trainers around just to look over the entire training activities and events (Biggs, 2011). The crossbred approach can become an effective option if educational institutions are looking for other ways to provide their learners with a more "personalized" experience in their studies and not worry about stretching their budgets. It is a mixture of in-person instruction accompanied by online learning. The crossbred approach to teaching and learning yielded positive outcomes. Duncan (2010) stated that the U.S. Department of Education statistically discovered that digitalized learning and teaching classes had made a better outcome than their in-person meetings, non-digitalized equivalents. This rapidly increasing model not only grows the flexibility and individualization of learners in their studying experiences but also allows instructors to expand the time of their availability as guides of learning. The digitalized approach is a form of learning in which learners work remotely, and resource is basically delivered via an online platform. One-on-one meetings are optional. Usually, learners can chat with teachers via the internet if they have questions. This type of approach is ideal for learners who need more flexibility and independence in their daily schedules. It is becoming popular, and the number of learners participating in digitalized learning and teaching has increased by about fifteen percent (Tang and Chaw, 2016). Evolving technology augments traditional learning and the odd question is how to apply digitalized learning in the traditional classroom setup. It is an instruction pattern that mixes various techniques in learning. Digitalized learning means the utilization of laboratory equipment to support the interactions in the classroom and improve the teaching process through the application of theories learned in class. The digitalized learning approach can be the complementary use of electronic learning in the standard education model because of the benefits it offers on a very wide scale, for example, self-paced learning, testing, quizzing, monitoring, and feedback.

Learning for post-millennials (Beresford Research, 2022) or also known as Gen-Zer (Oxford, 2022), was designed as more engaging, active, incorporated, and on-demand online learning tools and more collaboration. Teachers apply flipped classrooms, where videos of their lectures are recorded and assigned to students to watch as homework. While during classroom time, there are active learning activities such as class discussions and solving problems. They learn by doing; they are anything except passive learners. According to Barnes & Noble College (2015), they predominantly learn by doing and prefer active learning environments. They expect on-demand learning tools, and they love video so much. It was also mentioned in the report that their sense of connectivity and their desire to learn new things means they are extremely comfortable collaborating with others through technology. The Annie Casey Foundation (2021) and Barnes & Noble College (2015) described the central attributes of the "Gen Z-ers" as follows: (1) racial diversity-which means they are not that affected in terms of multiracial, sexual, or religious differences as compared to their older counterparts; (2) very first digital natives-they was born into the world of peak technological innovation in which information is readily available and accessible; (3) pragmatic a financially-minded, because they value stability that comes with conservative spending, stable jobs, and smart investments; (4) mental health challenges-as the "loneliest generation", they are affected by the turbulent state of the world; (5) shrewd consumers-the

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purchasing decisions are an expression of their values and identity; and (6) politically progressive-more likely to attribute climate change to human activity rather than as a natural pattern. In general, they are socially minded, independent thinkers who recognize their responsibility to shape a more equitable future for all.

The integration of digital tools into a customary approach in education provides a greater value to the learning of students as well as facilitates modern approaches in teaching. Teachers were expected to provide lecture series in the traditional educational system. Diversification requires a model of lectures pre-recorded and shared with students so that they may watch them at their own pacing. According to Poon (2010) and co-authors, classroom setup is more of the programmed or structured activities applying the school's curriculum. Classroom time is spent providing instructions which then leads the students to do the task independently using online mode. However, Donnelly (2010) wrote that it is better to have in-person meetings before letting the class utilize discussion boards. Puentedura (2014) emphasized that in the new lenses of teaching and learning mode, teachers are mere "facilitators". The following key areas are the focus: (1) establishing synchronous and asynchronous modules; (2) providing learners guides in communication with and among themselves; (3) assisting and editing materials to improve the learning experiences of learners; and (4) assessing using rubrics.

The efficient use of digital tools is the key to successful technology integration, which is appropriate for the task. A good toolkit is essential for designing learning experiences that reach the level of modification and transformation from the SAMR model by Puentedura (2014). With the aid of technology, everything educators need to use to develop their own toolkit of flexible resources technology is already provided. The redefinition level has no boundaries in terms of designing projects. Truly, the SAMR model covers an entire spectrum of technology integration. As soon as teachers begin exploring technology, applying it in the actual act of teaching each lesson is as easy as ABC. This process falls under the augmentation or substitution level. Under the substitution level, teachers may use PowerPoint presentations rather than using whiteboards. It becomes easy because notes and information will be projected on the board instead of writing notes on it. At the same time, the level of augmentation is when a teacher may include media and videos in the presentation to enhance the discussion.

In thinking outside the box, teachers are encouraged to use the teaching tools in the past, like projectors or cameras, to engage students in the discussion. A smartboard (Cox, 2019) is also advised to use so students can work with other students collaboratively. Technology is necessary for synchronous, asynchronous, or in-person meetings for the active participation of students (Hrastinski, 2008). This is the highest level, in which learning is not limited to the physical environment or space. Educators can be creative in teaching and allowing learning among his/her students through group investigation wherein they work in collaborative groups in researching topics (Brame & Biel, 2015). Learners may use several devices in class through in-person meetings and continue online through the shared link, i.e., Google document. After that, they can start working together to create their own multimedia presentation. During the presentation, their classmates crowdsource notes through a class link or channel (Tucker, 2013). After the presentation, students may review and discuss the link or channel notes. The interwoven online collaboration and in-person elements bring high-quality output. On a high note, some educators had progressed in applying all the stages in the model within just a few months. Some needed

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extended time in shifting their teaching aid thru technology to make students more engaged with technology apps. Actually, it even involves a longer time to redefine what it means to teach and learn by using seamlessly blended learning mediums. Technology integration is really a process; however, with the advent of the pandemic due to the Corona Virus 2019, technology integration took so fast in a way that it could take us years to accomplish (Boonmoh, Jumpakate, Saengmanee & Rungkaew, 2022). Unlearning and relearning are the keys to be able for educators to cope with the challenges of technology in 21st-century teaching to a generation called the post-millennials (Miano, 2019).

The SAMR (Substitution, Augmentation, Modification, and Redefinition) model of Ruben Puentedura (2014) is a direct and plain diagram that can be adapted to all types of learning environments. There is a transition to applying technology in education that the author believes is applied by the majority of teachers when they start using technology to teach students. There is somewhat an important development in the form of complexity about "substitution" to "redefinition" as per this model. In light of Puentedura's model, the researcher took it as a challenge to apply technology in her classroom teaching. She understood that she was fortunate to have different technologies at her disposal for teaching students in the four-walled classroom setup. It is based on this model that the researcher accepted the challenge to evaluate digital literacy in a classroom setup. The modification of old techniques in able to facilitate a hands-on experience for learners became possible because of technological aspects. Premade lessons from vast online resources are possible. Mobile phone applications are even advantageous and can be utilized and help as many as 50 or more students in a class to be engaged. The innovation and designs also offered so many ways to assess the formative and summative performance of students. They can also provide numerous ways to redefine the provision of knowledge content and make students become more engaged. A poll survey, for instance, can be used by teachers for feedback or a pre-assessment system before embarking on a new lesson topic. Student collaboration can also be given to groups of learners using mobile applications or software to complete tasks. A peer review and additional summative assessment tools can be possible by asking the students to share their output through posts which will close the loop. The SAMR model is a powerful conceptual tool for thinking about technology integration, which was developed in the year 2010.

"Genyo" e-Learning – one of the major products of Diwa Learning Systems, Inc. in partnership with Singapore's Times Publishing Group, providing the e-learning program of about 65% of schools in Singapore is now utilized by many of the basic education sectors in the country (Quimbo, 2012). Pampanga Central College was one of the first private schools in the country that took advantage of utilizing this learning management system in their school strategy.

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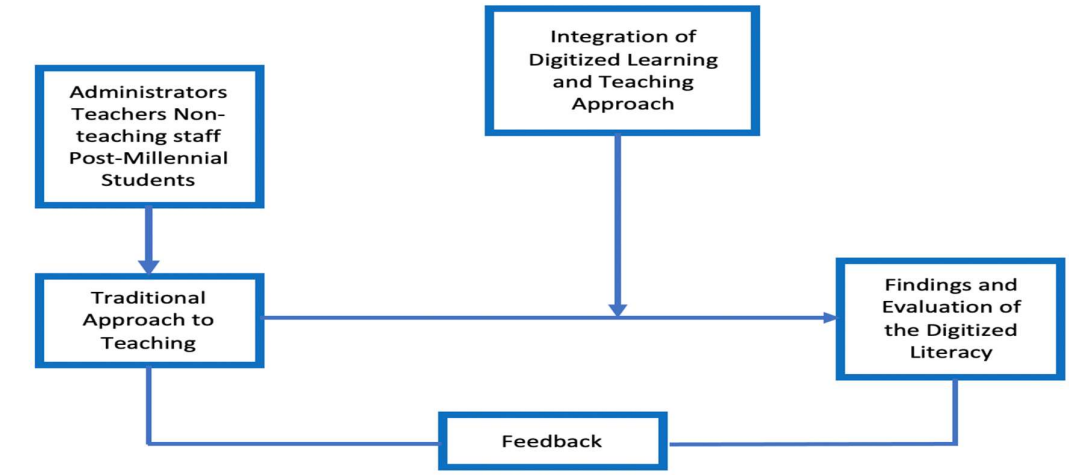

Figure1. Digital Literacy

It illustrates the operational framework of the study using the Digital Technology Theory and the SAMR model as bases for the approach. As shown in the framework, digitalized approach as utilized will be assessed on its effect on teaching students in the subject private school.

RESEARCH METHOD

The research design for this study was a combination of both descriptive-quantitative research designs. Descriptive research is used to depict the features of a general population or peculiarity. In this research, the survey method was adopted, where questionnaires were circulated and distributed to respondents, which were then dissected and analyzed by the researcher (Bryman and Bell, 2011, 45). The descriptive research design was suitable for this study because it included gathering/collecting information to test questions concerning attitudes, feelings, and opinions about the respondents. It is utilized to test attitudes, feelings, and opinions about occasions, people, or procedures (Gay & Airasian, 2003). Kothari (1995) notes that descriptive survey design is concerned with identifying, recording, investigating, analyzing, and reporting good circumstances that exist or exist. Engelhart (1972) contends that descriptive methods are used to acquire information helpful in assessing present practices and giving the premise to decision-making. Quantitative research design, as Bhandari (2022) defined it: " is a process of collecting and analyzing numerical data". She also further discussed that "it can be used to find patterns and averages, make predictions, causal test relationships, and generalized results".

The 47 respondents are the administrators, students, and non-teaching staff of a privately-owned college along MacArthur Hiway, San Agustin, San Simon, Pampanga, Philippines. It is one of the oldest educational institutions in the municipality of San Simon under the leadership of the successors of the late founders Erasmo G. Punsalan with his better half, Leonida (PCC or Pampanga Central College Student's Handbook, 2022). This school used to be a solely privately-owned school providing secondary education in the vicinity. The school has a separate building for computer

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classes and a building for administrative staff and for the library, as well as a covered court in its one-hectare lot.

The survey instrument was self-made and structured carefully so that what was being asked could be understood clearly. It includes the description of the participants like: "classification, department, office, and subject taught." For its reliability and validity tests, the author consulted experts regarding the questions to be asked to the respondents. The instrument was also pilot-tested on 20 individuals with the same qualifications as the respondents. The first section was all about the respondents' experience of applying digital literacy. The second section focused on their satisfaction in applying it, while the last section was about the suggestions on the innovative approach. The first question under the first section was answerable by either yes or no. Whenever the answer is "yes", more question is asked, and you have to skip the next question. But when they answered "no" in Question number 1, they needed to automatically answer the second item. The last question utilized a five-point Likert Scale. Section 2 is about the general fulfillment in the application of digital literacy; a four-point Likert Scale was used; 4= Strongly agree, 3=Agree, 2=Disagree, and 1=Strongly disagree. The last section – Section 3, was about respondents' comments and suggestions about digital literacy.

The researcher asked the permission of the owners and administrators through the School Principal and distributed the instruments. Prior to the actual survey, the researcher opted to have an in-person meeting with the principal to verbally ask for approval. Once the request was granted, the researcher determined the total number of survey forms be distributed to all teachers, non-teaching staff, administrators, and senior students in high school. As ethical consideration, the author had no direct involvement in the distribution and collection of the filled-out survey forms.
All information collected was classified, tallied, and organized into tables and according to paradigm using qualitative and quantitative terms. The researcher utilized Frequency, Percentage, and Means with Standard deviation as her statistical tools to find answers to the questions. Frequency and percent were used for data that are nominal. Means together with standard deviation were computed for questionnaire items that are on 5-point and 4-point Likert scales. The following tables were used to evaluate the ordinal data:

Table 1. Ordinal Data Evaluation

Likert Scale (1)	**Likert Description (2)**	**Value Allocation (3)**
1	Least compelling	1.00-1.49
2	Less compelling	1.50-2.49
3	Compelling	2.50-3.49
4	More compelling	3.50-4.49
5	Most Compelling	4.50-5.00
Likert Scale (1)	**Likert Description (2)**	**Value Allocation (3)**
1	Strongly Disagree	1.00-1.49
2	Disagree	1.50-2.49
3	Agree	2.50-3.49
4	Strongly Agree	3.50-4.00

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FINDINGS AND DISCUSSION

The research presented the evaluation of digital literacy in relation to its compelling effect on learners' full engagement and fulfillment. Target respondents were: 12th graders, teachers, non-teaching personnel, and administrators of a private college in the province of Pampanga. A grand total of 7 administrators and non-teaching staff, 11 teachers, and 29 12th graders participated in the study. Obtained results from the carried-out survey about applying digital literacy and its effect on productivity learning went through statistical analysis. The results are presented below:

Table 2. Classification of Respondents

Respondents	Frequency	Percentage
Administrators and NTP	7	14.90%
Faculty Members	11	23.40%
Grade 12 Students	29	61.70%
Total	**47**	**100%**

A total of 47 respondents participated, with their categories are on Table 2. Students composed the highest number of respondents in this study. 7 Administrators plus non-teaching personnel comprised 14.90%, 11 faculty members teaching 11 different subjects/courses, and 29 students in the senior high school level of grade 12 were the participants. The respondent's private school is just a small private school in the province of Pampanga. The 29 students are 100 % Accountancy, Business, and Management track students of grade 12.

Table 3. Subjects Taught

Subjects	Frequency	Percentage
Applied Economics	1	9.09%
Contemporary Philippine Art	1	9.09%
Earth and Life Science	1	9.09%
Empowerment Technologies	1	9.09%
English	1	9.09%
General Mathematics	1	9.09%
Physical Education	1	9.09%
Personal Development	1	9.09%
Philosophy	1	9.09%
Practical research 2	1	9.09%
TVL-Cookery 12	1	9.09%
Total	**11**	**100%**

All courses or subjects with a total of eleven are listed in the succeeding tabular form alphabetically. The subjects/courses are included to evaluate whether the level of digital literacy is dependent on the kind of course/subject taught. It is interesting to note that in this particular study, the physical education teacher was so grateful to technology because she could teach students better and that students were learning better with the integration of digital technology in teaching. However, the dissertation paper by Kretschmann (2015) revealed that high school-level in-service Physical Education teachers tended not to use technology and general instructional media in the subject/course.

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Table 4. Utilization of Digital Learning in teaching

Answers	Administrators & NTP	Faculty	Grade 12 Students	Frequency	Percentage
Yes	2	5	25	32	68.09%
No	5	6	4	15	31.91%
Total	**7**	**11**	**29**	**47**	**100%**

The learning management system known as Genyo ("Generation" and "Youth" combined) e-learning is shown in Table 4. Results showed that five out of eleven teachers are into digital literacy, one college administrator, and one non-teaching personnel favored the application of the innovative learning and teaching platform. As expected, most of the learners applied digital literacy by using the most innovative technology available to support their learning and were beyond grateful for the integration of the same in their studies. These five teachers are the younger generation educators compared to the other six. In comparison to Casey Foundation (2021), it stated that one of the core characteristics of the people classified under generation Z or the post-millennials is more into technology and social media. This result confirms Casey Foundation's revelation on this matter.

Table 5. Barriers to utilizing digital learning

Barriers	Frequency	Percentage
1. Unstable internet connection	15	31.91%
2. Weak Signal	12	25.53%
3. Availability of internet at home	8	17.02%
4. Availability of internet at school	6	12.77%
5. Others: not applicable to the subject	6	12.77%
Total	**47**	**100%**

Table 5 showed the top drawbacks, namely: internet connection which is unstable, a signal which was weak, and the availability of internet connection at home. The result is similar to the report given by the National Economic Development Authority (or NEDA) on the challenges encountered in the major areas of the country in terms of internet connection and the technology improvement of the far-flung areas in the country.

Table 6. Effectiveness of Digital Literacy

Likert Scale (1)	Likert Description (2)	Value Allocation (3)	Frequency(4)	Sum[(1)*(4)]/n
1	Least effective	1.00-1.49	3	3
2	Less effective	1.50-2.49	3	6
3	Effective	2.50-3.49	12	36
4	More Effective	3.50-4.49	14	56
5	Most Effective	4.50-5.00	15	75
	More Effective		**47**	**176/47=3.74**

In Table 6, it was evident that digital literacy was more effective than just the traditional method of teaching and learning, with an overall score of 3.74. The majority of the teachers and

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students observed that technology integration and digital literacy were so effective and contributed to the ease of teaching and learning for both educators and learners. Tucker (2013) explained that it is easier to get information through technology and the internet, and most likely, those who are adept at using it will favor its integration into the curriculum. The results in this study are somewhat similar.

Table 7. Have another digital learning approach to teaching

Likert Scale (1)	Likert Description (2)	Value Allocation (3)	Frequency (4)	Sum[(1)*(4)]/n
1	Strongly Disagree	1.00-1.49	4	4
2	Disagree	1.50-2.49	4	8
3	Agree	2.50-3.49	26	78
4	Strongly Agree	3.50-4.00	13	52
	Agree		**47**	**142/47=3.02**

Generally, as shown in Table 7, the majority of the participants of the study would still agree to have another school year of digital literacy, with a final score of 3.02, which is interpreted as "Agree." This confirms the result in the previous table. Most of the participants are eager to have more technology and digital literacy integration in their curriculum. Since the majority of the respondents are from the millennial group, it is expected to show that they are delighted to utilize technology in teaching and learning.

Table 8. Level of Fulfillment of digital literacy

Likert Scale	Likert Description	Value Allocation	Frequency	Sum[(1)*(4)]/n
1	Strongly Disagree	1.00-1.49	2	2
2	Disagree	1.50-2.49	10	20
3	Agree	2.50-3.49	25	75
4	Strongly Agree	3.50-4.00	10	40
	Agree		**47**	**137/47=2.92**

The fulfillment rating of the 47 participants was 2.92, which conveyed that they are all fulfilled with digital literacy as an approach to teaching. The results in this table show and confirm the results of the data from the previous two tables presented. Biggs and Tang (2011) described that quality learning entails satisfaction in the adaptation of technology into university teaching. At the same time, the results of this study showed that fulfillment is dependent on the level of digital literacy of the students.

Table 9. Advantages of using digital learning

Advantages	Frequency	Percentage
1. Flexibility to complete assignments	28	59.57%
2. Convenience	4	8.51%
3. It is a requirement for course	11	23.40%
4. The only available option	2	4.26%
5. Job Responsibilities	2	4.26%
Total	**47**	**100%**

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The 8th table shows the top two comments on the benefits, which are "flexibility" in doing their assignments, with 28 respondents or 59.57% choosing it, and "it is a requirement of the course", respectively. Barnes and Noble College (2015), the middle and high schoolers expected that what they experienced would be the future scenario in their university life. Since university life entails independence and individuality, as well as high school, is a preparation and a training ground, they expect that they will start in senior high school with the integration and application of digital literacy. The results of this study are somewhat aligned with that study.

Table 10. Most Compelling Features of digital literacy

Most Compelling	**Frequency**	**Percentage**
1. Easily get information and idea	20	42.55%
2. Helps to understand lessons	7	14.89%
3. Learners could work independently	9	19.14%
4. More Effective on students	3	6.38%
5. Students can watch lessons repeatedly	2	4.26%
6. More efficient learning	2	4.26%
7. It helps students recall topics	2	4.26%
8. Students can easily be motivated	2	4.26%
Total	**47**	**100%**

The most compelling feature based on the participants' choice, as presented in Table 10, was " easily gets information and idea". This means that through digital literacy, anyone can easily get information and idea from various sources on the internet. Various arrays of information are just one click away. Millennials, who are also digital natives and more adept in terms of technology application as compared to their older counterparts, can access available digital resources.

Table 11. Least Compelling Features of digital literacy

Least Compelling	**Frequency**	**Percentage**
1. Less student-teacher interaction	18	38.29%
2. A lot of fake news and information	25	53.19%
3. Abuse of Technology	2	4.26%
4. More of a distraction	2	4.26%
Total	**47**	**100%**

Last but not least, Table 11 showed the least compelling feature; however, educators were concerned that it had replaced the traditional way of interacting, and there is lesser interaction between students and teachers. Modern learners are more dependent on technological access leading to less dependence on printed books and other references in the library. These findings support that of the study by Pandya and Lodha (2021), where they emphasized that isolation and prolonged screen time are a few of the negative effects of digital literacy. World Health Organization (2020) also highlighted that increased screen time replaces healthy behaviors and habits like physical activity and regular sleep routine which leads to harmful effects on the body.

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CONCLUSION

From the outcome of the study, digital literacy is highly useful in teaching and learning the post-millennials or also known as generation z people. Specific questions were also answered in the results, such as : (1) There was evidence of digital literacy in the respondent school because they are using "Gen-Yo" or "Generation and Youth" application software; (2) Top three specific drawbacks of digital literacy, were: unstable internet connection, weak signals and the availability of internet in their respective residence; (3) In terms of the level of productivity of students, they were more likely to complete assignments under time constraints, and it was most convenient to them; (4) As for their general fulfillment, both educators and learners were all satisfied; (5) The most compelling feature of the application software that they are using was that they could easily get information and ideas; and (6) the least compelling feature was that there was less student-teacher interaction.

Based on the results of this study, the researcher concluded that in our current generation, technology and digital literacy are unavoidable. In fact, they are absolutely necessary and essential in taking on the new challenges of teaching and learning; without a doubt that the inclusion and application of innovative approaches like digital literacy are affecting education systems around the globe in delivering information and teaching the new breed of students – the post millennials. Based on the results, there are some fascinating insights into the continuous use of traditional teaching learning in our current education system. It showed that dependent on the subject being taught, that technology may be applicable or not. Oddly, a Physical Education teacher uses videos and audio to support his teaching style and help students remember certain topics. While theoretical subjects like philosophy and entrepreneurship, the results provided that digital literacy was not a practical approach. For most of the teachers, results showed that they prefer the in-person lecture and discussion to utilize technological mediums, such as social media and online communication. The engagement of modern-day learners depends on the application of digital literacy among high school students

LIMITATION & FURTHER RESEARCH

This study is focused only on a private college in one of the provinces of Central Luzon, Philippines. There are many private educational institutions around Region 3 or Central Luzon as well as nationwide. All results are exclusive to this particular college and may or may not be applicable to all private educational institutions nationwide or within the ASEAN region. A one-size-fits-all model for the improvement of educational systems would not be feasible. The Philippines is composed of diverse provincial contexts, which is why recommendations from this study leave space for the local and national government policymakers and the Ministry of Education headed by the current Vice President, Sarah Duterte-Carpio, and its staff to determine important lessons based on the country's development needs.

Based on the findings of this study, the researcher recommends the following: Further and additional research are needed to determine productive strategies for the provision of internet connection in schools and classrooms in the country. Further research will address the structural and attitudinal hurdles and their resolution. Additional research could explore the possibility of allowing international telecommunications companies to break the long period of oligarchy in the telecommunications industry. Resolving monopolistic control of the industry gives way to equal

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chances for all students regardless of area and economic status. Research to look into deeper issues such as lack of training in terms of technology and adapting an e-learning educational system for the school. The research should also assess training needs and readiness in utilizing technology both for teaching and non-teaching staff. Technology and advancements have their own pros and cons. Research could be made to have equal footing for all types of students on the utilization and application of technology to the current curriculum of the K-12 without letting the more emphatic way of addressing their needs.

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