

Investigating Nearpod as an Online Tool for a Transformative Learning Experience among College Students

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Abstract

Even before the Covid-19 pandemic, Nearpod has been one of the top-choice apps used to supplement learning among educators and districts in the United States; thus, this descriptive research study explores the different features of Nearpod as a revolutionary platform for online and face-to-face learning and investigates what Filipino college students feel about using this app. In regard to this, we surveyed 224 college students who had at least 4 months of Nearpod experience through Google Forms with poll and open-ended inquiries. We employed the mixed method and conducted a thematic analysis of the qualitative data with the aid of the MAXQDA 2022 software. We found out that students chose social motivation, creative expression, and personalization as key reasons that there was high student engagement when Nearpod was used in the classroom. Results showed further that 96% of the students said “they sometimes or often interact with other students in a way that helps them learn”; 99.5% felt that “their teacher knows how they are doing with the material some or most of the time”; 95% said that “someone will see the work they do”; 96% felt that “they can express themselves sometimes or often creatively”; 99% felt that “the quality of work they make is good or higher”; and 0.4% (1 person) indicated that “they are not interested in the topics presented on Nearpod”. Hence, this research validates that the use of Nearpod for both educators and learners has paved the way to transformative education because motivated students engage themselves in a variety of interactive lessons and activities, and according to Anwar (2019) and Javed and Odhabi (2018), learner’s motivation, student engagement, and academic achievement are positively correlated.

Keywords: *Nearpod, Edtech, Transformative, Online tool, Student engagement, Social motivation, Creativity, Personalization, Gamification, Academic achievement*

Introduction

The proliferation of online tools and resources in meeting the needs of college students due to the recent popularity of distance learning or online education paradigm. It opened the path for educators working in a university to become creative in their instructional pedagogies wherein student engagement is maximized to produce more satisfying teaching and learning outcomes.

Nearpod, which is a web-based interactive tool and environment that works on both personal computers and smartphones, has made teaching easier for teachers through interactive lessons and activities for instructions conducted whether online or face-to-face and whether synchronously or asynchronously. With mitigated data-privacy risks for all users, Nearpod offers a range of opportunities for more efficient and effective academic experiences that have become indispensable for learners, educators, and learning environments. The use of Nearpod, coupled with the appropriate teaching strategies would be effective when projected into an educational model that looks at motivation, usability, engagement, and technological acceptability in the teaching and learning realms of both teachers and students. (Quezada, Rivera, Delgadillo, and Cajo, 2021). Hence, the use of this online platform for both educators and learners has paved the way to transformative education because motivated students engage themselves in a variety of interactive lessons and activities, and according to Anwar (2019) and Javed and Odhabi (2018), student motivation and engagement have a positive correlation with academic achievement.

A recent study shows that there are positive perceptions towards Nearpod use among students in the university when it comes to distance education in other countries (Musa & Al Momani, 2022). In connection to this, the researchers aim to investigate what the majority of college students who used Nearpod in their classes feel about Nearpod and what percentage of the respondents believe it is the case. The researchers also intend to explore the perceptions of students about their experience with Nearpod and which features or elements of Nearpod they consider favorite.

Statement of The Problem

This study aims to investigate the perception of and experiences of college students who used Nearpod as an online learning tool.

1. How do college students who used Nearpod in their classes feel about Nearpod in terms of:

- a. social motivation,
- b. creativity, and
- c. personalization?

2. How do students describe their experience with Nearpod?

3. What are the students' favorite things about working with Nearpod?

Significance of the Study

- **Teachers and students**

To provide awareness that Nearpod is a great tool for every student to be engaged in classroom activities, collaborate with peers and the instructor, and also learn in fun, interactive, and creative ways.

- **School**

For the school board to consider in their administrative decisions and initiatives to further their higher education programs which may entail mobilizing teachers to use Nearpod for more

meaningful classroom learning experiences whether in a face-to-face, online, or blended classroom environment.

- **Future researchers**

To serve as theoretical framework reference in conducting future related studies

- **Nearpod company**

Feedback from the perspectives of college students in the Philippine context so the company will know the most-loved features of Nearpod and what students feel about them. This way, Nearpod will have a basis should they work on improving the current features and adding more for more revolutionized classroom experiences.

Scope and Delimitations

Our respondents were taken from groups of college students who had used Nearpod in their classes through face-to-face, online, or blended instruction at a respected university in Valenzuela City, Philippines as of Dec 23, 2022.

Moreover, this study:

- focused on the 3 out of 5 variables that make educational technology good as described by Havens (2014);
- described the perceptions of students about their experience with Nearpod when it was being used both as a learning tool and as a learning environment by their teachers and when they used it to present a class project or presentation;
- did not discriminate the perceptions of students according to the type of learning environment (i.e., physical, virtual, or blended) for which they used Nearpod; and
- did not investigate issues concerning user data privacy, but the researchers are aware about the Nearpod and the California Consumer Privacy Act that discusses the rights of the users and explains the disclosure statement on personal information collected which can be viewed and read on the Nearpod's website.

Learnings from Distance Learning

Fidalgo et al. (2020) found that the students' primary concerns regarding taking distance education courses were time management, motivation, and English language skills as they were non-English natives. A study on distance learning approaches (Armstrong-Mensah et al., 2020) revealed that students were still motivated to learn and to complete their assessments and assignments on time.

Simorangkir (2018) stated that online learning triggers students to be more active in seeking and understanding the concept of each material being studied. The abrupt and numerous changes necessitated modification in the curriculum development process particularly in the implementation phase, teaching pedagogy, learning experiences, and evaluation which affected the lives of the students who were coaxed to adapt to the new normal Salazar, De Leon and Legaspi (2021).

Teachers have become habitual to traditional methods of teaching in the form of face-to-face lectures, and therefore, they hesitate in accepting any change. Amidst the crisis, adapting to the dynamic situation and accepting the change is an alternative. The students who do not have access to all online technology were less affluent and belong to less tech-savvy families with financial resources restrictions and may lose out when classes occur online. They may lose out because of the heavy costs associated with digital devices and internet data plans. This digital divide may widen the gaps of inequality (Dhawan, 2020).

Wong (2020) showed that the basic learning needs of autonomy and competence were met through online learning but not the need of relatedness. Autonomy was found to have a direct relationship with competence but not relatedness nor was there any relationship between motivation and other learning needs. It was so found that positive and adequate negative arousal could serve as a catalyst to facilitate effective online learning. Online learning was found to be advantageous as it provided flexibility and convenience for the learners. Students preferred well-structured content with recorded videos uploaded in university websites. They also indicated the need for interactive sessions with quizzes and assignments at the end of each class to optimize the learning experience (Muthuprasad, Aiswarya, Aditya and Jha, 2021).

Scanlon (2021) identified personalization as one of rising present-day trends in research concerning educational technology. Personalized learning modalities cater to the diverse skills and demands of students, and current studies (Jorno et al, 2022; Daruwala et al., 2020; Prihar et al., 2022) suggest that there is a need to re-evaluate the ideal of personalization and to innovate and refine technology-enabled personalization systems for maximum efficiency in delivering instruction to students with different learning profiles.

Influence of Blended Learning on 21st Century Skills and Motivation of Students

Hidiyanto, Fallasofah, Armiwati, Abrar and Thabran (2021) mentioned the different level of 21st century skills practices between conventional and blended learning class. The ability for implementation to provide more opportunity to practice skills. Students are able to explore ideas, discuss, learn strategies, ask questions and give feedback, using ICT to communicate, and solve problems. Also, the practice of soft and hard skills has become more frequent and has great impact on the expected abilities, including academic achievement.

Dakhi, Jama, Irfan, Ambiryar and Ishak (2020) stated that Model Blended Learning (MBL) is one of the new ways to improve the learning process of teaching. The learning that is present at all times is the potential, opportunity, and challenge in learning. According to Hashemi (2020) blended learning can substantially enhance the student experience if it is implemented "appropriately".

Rahim (2019) concluded that the blended learning approach is an integration of online education with traditional methods which can be applied effectively for EFL education enhancements. It provides a flexible learning platform, endorses EFL learners' motivation toward authentic language learning practices, and leads to better academic achievement. There was an influence of students learning with a blended learning and project- based learning. Students who

advance their academic skills through blended learning and project-based learning can improve student's HOTS rather than blended learning only (Eliyasni, 2019).

Rafiola (2020) mentioned that there are indicators that show an emerging need to integrate technology into face-to-face language classes. The new generation is equipped with a digital background; thus, the mixed learning approach can be very useful because it will improve the quality of learning and increase student access to information. Blended learning has a positive and significant effect on students' achievement among public high schools.

The idea of utilizing interactive educational technological tools has increasingly become helpful in the teaching-learning process. In their study, Adlet et al (2022) disclosed that students who were exposed to a significant amount of classroom activities asserted that interactive technological learning modalities have helped them improve their skills and abilities in the areas of academics, and technological literacy, as well as in their intrapersonal and interpersonal affairs.

Ghani and Taylor (2021) utilized the Community of Inquiry framework that allowed them to consider student insights in order to understand how educators, who implement the blended learning paradigm, promote student engagement. Focus was placed on sharpening the students' higher-order cognitive abilities as a way of boosting an active learning classroom experience.

In their article, Serrano et al. (2019) argued that there is a need to raise higher education professionals' knowledge of how blended courses can replace traditional face-to-face instruction in order to improve student learning. The researchers found that if used properly, combining important learning environment components including face-to-face, online, and student-paced learning methods leads to better student results and experiences as well as more effective teaching and course administration techniques. It follows that to achieve a successful outcome, a blended learning design that is suitable, methodical, and dynamic is essential. This starts with the planning of how to incorporate mixed aspects into a course, as well as the creation and implementation of blended activities. For the subsequent delivery of the course, it is crucial to assess their efficacy, identify the situations in which they perform best, and improve the blended activities created from the viewpoints of both students and instructors.

Using interactive games to maximize student engagement and motivation in the classroom has been an area of concern among researchers. Although philosophically intriguing, actual research on the use of gamification in learning environments has produced contradictory findings. Using the bibliometric analysis tool "HistCite," Luo (2021) chose 44 papers on the subject of educational gamification in order to better grasp the problem. The efficacy of educational gamification implementations in earlier empirical studies, how effectiveness has been quantified, and what factors contribute to varying effectiveness results were three topics that the author looked into.

One of the issues that can arise in online learning environments is a lack of learner motivation. Gamification might be suggested as a potential remedy for the lack of motivation in educational settings online. Ertan and Arkün Kocadere (2022) presented a comprehensive overview of gamification research that concentrates on motivation in distance learning and to offer helpful advice for creating gamification. This review gave a broad overview of how gamification affects motivation and makes recommendations for potential future applications, such as employing badges or scores to demonstrate competence, combining collaborative and competitive elements, creating

various types of scoreboards, giving students prompt, automated feedback, assigning students challenges that are appropriate for their skill levels, creating interactive gamification systems that cater to various educational needs of learners, and eradicating technology-related issues.

Saleem and his team (2022) indicated that gamification is becoming more widely recognized as a valuable tool for creating more engaging learning environments. It was discovered that points, leaderboards, badges, and levels are the most often employed gamification components in e-learning and have a significant impact on students.

The unique impact of gamification using points as opposed to polls utilizing two alternative Kahoot modes was investigated. According to the findings of the study, point-based quiz mode gamification increases reported levels of student involvement in comparison to regular lectures, but there is no difference between this type of gamification and poll-based gamification. Nevertheless, when compared to the poll-based gamification condition, point-based gamification that promotes quick responses led to lower learning achievement overall; this effect was even more pronounced when measured one week after the application of the gamification strategy (Koppitsch & Meyer, 2021).

Nearpod and Its Unforeseen Benefits

According to Xian (2021), synchronous engagement in secondary biology classrooms brings a better classroom experience for teachers and students. Online interactive models increased their sense of classroom participation compared to previous online education that faced cold electronic devices and virtual teacher influence. Some students prefer asynchronous participation in the classroom because they can control the pace of their learning and have the freedom to schedule their study time. The timely interaction of synchronous participation can provide more opportunities for students to communicate and collaborate. This is one of the advantages of using Nearpod applications for online teaching and learning. Nearpod serves as a medium to provide continuous feedback to teachers and students, a good way to collect evidence of students' cognitive and non-cognitive achievements in online instruction, thus avoiding this situation and better-helping students interact with each other in the classroom, creating a virtuous cycle of teacher, student, and assessment. The Nearpod app made the class-competitive and fun.

Chiluisa and Janeth (2022) the application and training of technological tools for teachers and students during virtual classes is an important factor in helping the learning of a second language such as English. Students can interact in a dynamic way with their teacher, which also benefits them during the development of their English skills such as speaking, reading, writing and listening in an easier and faster way. Likewise, technological tools can act as a support for teachers by attracting the students' attention and motivating them to learn.

Qandeel (2022) the study discovered what the characteristics of the given feedback are and which level of feedback is more dominant in the online classes. The discovered characteristics or features of online feedback were summarized as being immediate, frequent and able to increase the students' awareness of each other's mistakes, able to give the students the opportunity to think critically, balanced, and able to foster equity and establish a sense of community

Putra, Arafik and Pratiwi (2021) the use of Nearpod in learning can improve student engagement in online learning. The use of interactive electronic applications in teaching has become part of the teachers' tasks, and one of these electronic applications is the Nearpod application which may contribute positively to the achievement and effective interactive learning for students, especially in the current era in which the world has shifted towards distance learning due to the Corona pandemic Covid-19, to ensure a healthy and safe educational environment for everyone (Abu Musa and Al Momani ,2022). Asadı et al. (2019) revealed that students who receive education in an interactive education environment perform better and communicate better than those who receive education in a traditional classroom environment. This is supported by Hakami's (2019) findings where he argued that the role lecturers play should shift from mere transmission of knowledge to facilitating learning while placing value on deciding which educational tools and platforms are appropriate in a certain academic context. Moreover, Nearpod complies with the California Consumer Privacy Act which is in support of what Schlosser et al (2022) underscored in their review when choosing the appropriate online educational technological tools for classroom use: that the frame of safety, which includes mitigated privacy risks for all end-users, be given sufficient attention.

In this direction, in this study, it is aimed to evaluate the use of interactive educational technologies as a factor in the development of university students' characteristics with student views. As a result, it has been revealed that university students tend to use interactive educational technologies. Students stated the positive effects of interactive educational technologies on improving student characteristics and in terms of learning skills, technology skills, cognitive skills, self-skills and social skills. In addition, university students stated unwillingness to learn, technology addiction and cognitive difficulties as the negative effects of interactive educational technologies on student characteristics.

Methodology

Research Design

In order to describe how college students feel about their experiences with Nearpod, the researchers used the mixed method following the descriptive research design. Quantitative method was employed to gather student responses to poll or survey questions, and these data were eventually measured in the form of percentages. On another hand, answers to open-ended inquiries that were appended to the survey were analyzed as qualitative data which entailed reading all the responses to look for similarities and differences, and in turn come up with themes and classify them into categories.

Respondents of the Study

The research team used purposive, voluntary sampling and started off with identifying the classes that had experience with Nearpod. The respondents of this study are the college students of a selected university in Valenzuela City, whose teachers had been incorporating Nearpod in their classes for at least four months, whether their learning environment was online, face-to-face, or blended, during the first semester of school year 2022-2023. They voluntarily completed a survey on Google Forms.

Out of the 224 students, 124 of them (55.4% of the respondents) were enrolled in Course 1, 78 (34.8%) in Course 2, 52 (23.2%) in Course 3, and 48 (21.4%) in Course 4. It must be noted that there were students who took two or more of these courses at the same time and they used Nearpod in their classes. Furthermore, the proponents did not discriminate the participants based on their year level, gender, and type of learning environment.

Research Instrument

The researchers used a Google Form survey based on the Student Survey Instrument (Kovalskys, 2015) which is available on the Nearpod website. <https://news.nearpod.com/pdf/student-perspectives-on-nearpod.pdf> This questionnaire consists of 12 survey questions and 6 interview questions—of which 5 of these are open-ended.

Data Gathering Procedure

Voluntary responses were gathered from the targeted college students who had at least one teacher who integrated Nearpod to facilitate his/her classroom activities. The following outlines the steps taken by the research team to collect the data: Classes whose instructors were using Nearpod in their instructions were identified. The groups identified were 5 Course 1 classes, 2 Course 2 classes, 2 Course 3 classes, and 4 Course 4 classes. The total number of students was about 350. A link to the Google Form survey was sent to the official chat groups of the identified classes. The respondents had to sign into Google with their school account to access the survey. A disclaimer was stated notifying every participant that completing the survey is voluntary and that responses will be kept with anonymity and confidentiality. Each respondent was asked to answer a questionnaire with 12 survey or poll and 6 interview questions. Five of these inquiries are open-ended and unstructured. The survey was administered from December 20-27, 2022, and it allowed only one response from each email address. Two hundred twenty-four students participated in the survey.

Statistical Treatment of Data

- The first phase of the survey consisted of 12 poll questions where the participants answered those queries by selecting from the options provided.
 - The first poll question was aimed at measuring the percentage of the respondents taking the specified college course. The formula used was $n \div N \times 100$, where n is the number of votes and N is the total number of respondents. Note: Because there were students who were enrolled in 2 or more courses at that time, the sum of the percentages is greater than 100%. This issue, however, does not considerably affect the purpose of the study.
 - Poll questions 2 to 11 were the select-only-one type. Frequencies were translated into percentages using the formula $n \div N \times 100$, where n is the number of votes and N is the total number of respondents.
 - Poll question 12 was the choose-any-that-apply type and was treated just like question 1.
- The second phase of the survey was composed of at most 6 questions where the respondents had an option whether to answer or skip each inquiry.

- o Question 13 was a yes-no question asking if the respondent had any experience using Nearpod in presenting a class project. This was a prerequisite for question 13a. If the respondent replied “yes” to question 13, he/she was asked to describe what the experience was like in question 13a.
- o For questions 13a, 14, 15, 16, and 17 which were open-ended, the researchers used thematic analysis with the help of the MAXQDA software to create summarized findings about the students’ thoughts and perceptions about Nearpod based on their classroom experience.
- o Only questions 13a, 14, and 15 were analyzed qualitatively for the purpose of this research. Through thematic analysis, the research team became more acquainted with the qualitative data that we collected from the respondents through the interview questions. We used the inductive approach which allowed us to determine our themes based on the data available instead of some preconceived categories. After reading through the responses and writing down initial notes, MAXQDA 2022 was used to create “codes” or labels to describe the ideas or perceptions communicated in the respondents’ answers. After generating and analyzing the codes, patterns and similarities were identified and these codes were categorized into themes. The themes were reviewed and named; subsequently, a report that presents the summary with only 6 themes was created.
- Questions 16 and 17 were only looked at to better understand if there were any vague answers or points of interest in the answers to the questions asked prior to them.
 - o Question 16: *What else can you tell me about your experience with Nearpod?*
 - o Question 17: *Would you like to explain any of your responses?*

Ethical Considerations

The research participants were informed about the nature and purpose of the study before they took part in the data gathering process. The respondents had the freedom to opt in or out while participating in the survey. They also agreed and understood that their cooperation in completing the survey meant that their responses would be given an adequate level of confidentiality and that their privacy would be protected as respect for the respondents’ dignity and welfare was the researchers’ priority. No names or personal information was collected and their sign-in to Google was their only ticket to access the Google Form survey. However, the e-mail addresses and any piece of information associated with the Google account were not collected and stored. Responses, which are accessible only by the research team and restricted from any alterations, were privately stored on Google form and in the researchers’ drive.

Every student who voluntarily took part in this study was free from any physical, psychological, financial, and social harm or discomfort with very minimum to no risk. Should there be any unforeseen, unwelcome events, the researchers ensure that the potential gains will outweigh the risks.

The Nearpod company is informed that the research instrument they made available on their website was used by the researchers; Nearpod even expressed support for this research study to come to fruition and offered an opportunity for the team to take part in the creation of a new instrument for future research studies.

Results and Discussion

In his whitepaper, Havens (2014) identified social motivation, creativity, and personalization as key variables that should be considered in choosing a good technological tool that maximizes student engagement. The following summarizes the results of this study.

Social Motivation

While engaged in Nearpod activities, 96% of the students said they sometimes or often interacted with other students in a way that helped them learn.

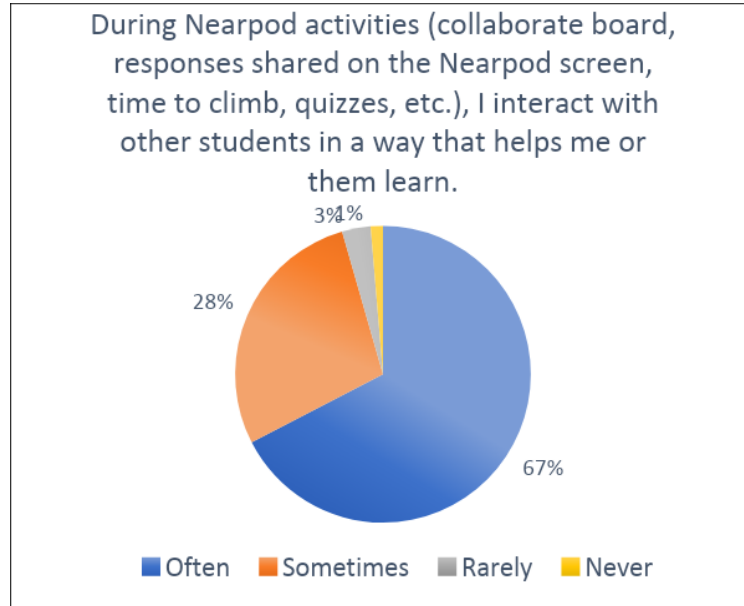


Figure 1: Respondents' responses to the survey Question #4:

About 99.5% of the students felt that their teacher knew how they were doing with the material or lesson some or most of the time while using Nearpod; 95% of the students said that someone would see the work they did during Nearpod activities.

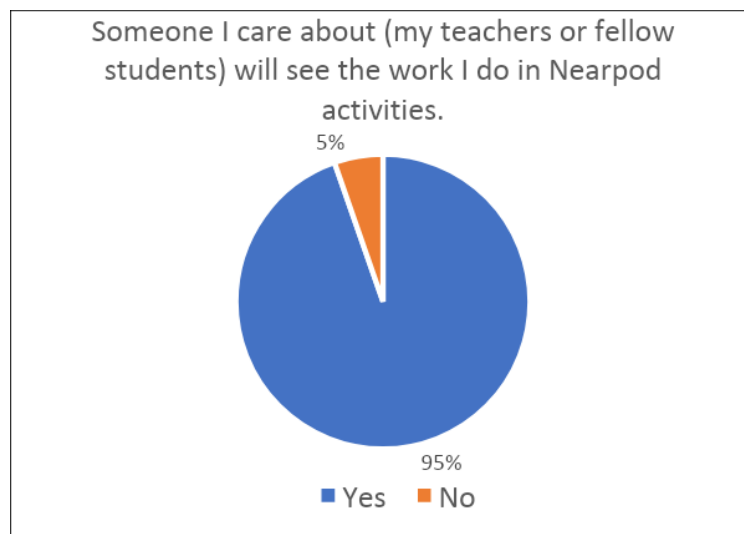


Figure 2: Respondents' responses to the survey Question #6:

When compared to classroom activities that do not use Nearpod, 71% of the students indicated that they “learn more” with Nearpod, 76.3% “participate more,” and 60.7% “work together with peers more.” Only 10.3% indicated that “things are the same in classes where they don’t use Nearpod.”

Creativity

Ninety-six percent (97%) of the students felt that they can express themselves sometimes or often creatively using Nearpod. Sixty-seven percent (67%) of the students claimed that Nearpod provided them avenues to express themselves creatively more than other classroom activities.

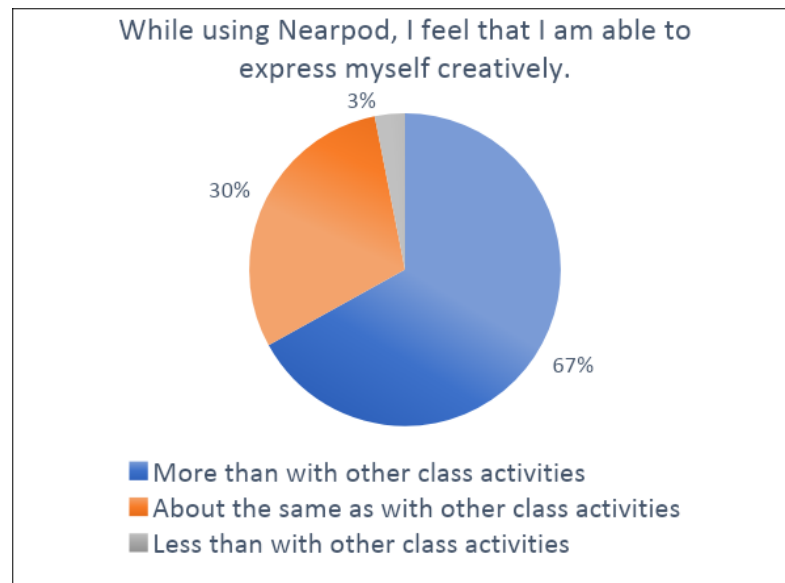


Figure 3: Respondents' responses to the survey Question #3:

Personalization

When asked how challenging the respondents found Nearpod activities to be, 88% said “just right.” A total of 99% of the students claimed that Nearpod activities are “not too hard.” Furthermore, 62% of the students claimed that their work and participation in Nearpod activities are the highest quality they can give.

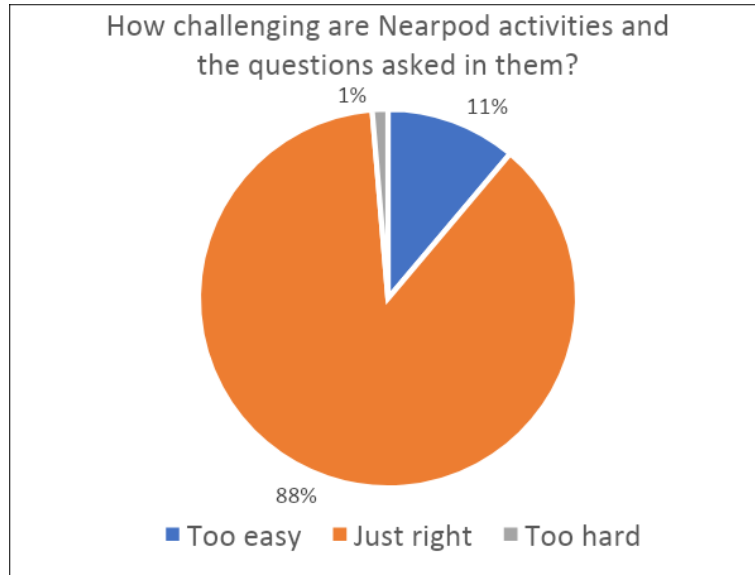


Figure 4: Respondents' responses to the survey Question #9:

A total of 99% felt that the quality of work they make is good or higher. About 83.6% were frequently-if not always-interested in the topics they learned about when using Nearpod. Only 0.4% (1 person) indicated that they were not interested.

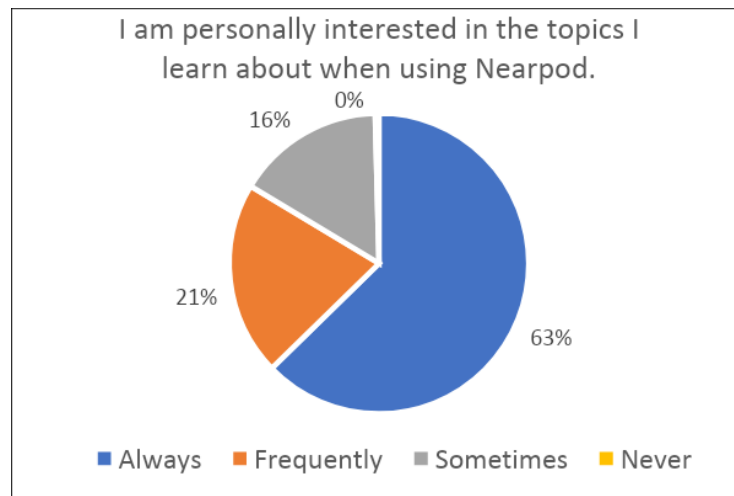


Figure 5: Students' responses to the survey Question #10:

The data that follow are based on the responses to the interview questions from the Google Form survey questionnaire. For the purpose of this study, only the responses from question 13 to 15 are considered significant, hence results will be presented in this chapter and discussed in the next. Responses to questions 13a, 14, and 15 underwent thematic analysis with the aid of MAXQDA 2022.

- Question #13a: If your answer in #13 is YES, what was that experience like? Was it easy to create your presentation? Do you think your fellow students enjoyed your presentation?

Response	Frequency	Percentage
Is fun to use	31	43.7%
Is easy to use	12	16.9%
Allows creativity	10	14.1%
Increases audience engagement	8	11.3%
Fosters collaboration	6	8.5%
Others	4	5.6%

Table 1: Respondents' response to Question #13a

These data in Table 1 clearly show that students felt that their Nearpod experiences were fun and interactive. Other reasons include the following: it is also user-friendly, allows creative expression, and fosters student engagement.

- Question #14: What is your favorite thing about working with Nearpod?

Response	Frequency	Percentage
Offers a variety of fun and engaging activities	147	60.7%
Provides avenue for creativity and self-expression	31	12.8%
Is easy to use	22	9.1%
Allows collaboration with teacher and peers	17	7.0%
Allows differentiation for higher educational achievement	13	5.4%
Others	12	5.0%

Table 2: Respondents' response to Question #14

Table 2 discloses that the top reason that students like Nearpod is the different fun and engaging activities that it offers. Being given opportunities for creativity and self-expression and ease of use are also among the top three reasons.

Kim et al (2020) identified student engagement as a desirable result of educational use of mobile devices which contributed a positive effect to the students' higher-order thinking skills, which include creative thinking and expression. In addition, perceived ease of use was positively correlated with student motivation, which positively influences learning satisfaction (Huang, 2021).

Asadi et al (2019) and Javed and Odhabi (2018) revealed that students in the virtual class had more opportunities to interact and collaborate with each other and with their teacher and that, in terms of academic performance, the students achieved more than their peers in the traditional classroom. This paper supports what Asadi's team found out as our data revealed that Nearpod allowed students to collaborate with teachers and peers and gave more opportunities to learn more effectively through differentiated instruction and activities.

Conclusions and Recommendations

Based on the results of this study, the researchers deduce that Nearpod is a revolutionary online platform for both educators and learners as the select college students in Valenzuela City, Philippines gave it high marks on social motivation, creative expression, and personalized learning. Havens (2014) considered social motivation, creativity, and personalization, together with educator engagement and interactivity, as variables for identifying tech tools that allow maximum student engagement.

After analyzing the results of the study and having a dialogue with one of the instructors of the respondents, the research team inferred that making Nearpod a transformative educational tool greatly depends on the teaching methods and strategies that the educator who incorporates it in the classroom employs. The instructor who regularly used Nearpod in his classroom revealed the Nearpod activities and features that he commonly used in his instruction, whether the lessons were delivered live or student-paced, depending on his learning outcomes and teaching approach were the following: draw-it, matching pairs, fill-in the blanks, time to climb, timed and untimed quizzes, poll, true/false, open-ended question, virtual field trip, links to videos and interactive websites, and collaborate board.

The features like draw-it, poll, open-ended question, and collaborate board evidently provide learners an opportunity to freely express themselves and showcase their creativity. The students' awareness that their instructor sees their work real-time, the "gallery walk" or anonymous public display of their output after the activity but shout-outs are given to fast completers and top achievers, the gamification and competition opportunities among students, the consistent teacher's feedback and feedforward on what and how they are doing make them motivated to accomplish their assignments with the highest output quality. Doing these activities with ongoing checking for understanding and teacher's scaffolding or guidance while students are engaged in the activities with opportunities to collaborate with peers, the learners generally rated their lesson as not "too hard" and they were interested in their lessons, which communicate that they were able to personalize their learning and make their learning experience meaningful and relevant to them.

We recommend that the University administrative board mobilize teachers and professors to use Nearpod or similar tools for a transformative 21st century learning experience that provide avenues for social motivation, creative expression, and personalization among students. This will entail investing in trainings, seminars, and workshops to prepare instructors and professors for innovative teaching methods that integrate Nearpod in their class activities for a meaningful blended learning experience.

Should the research instrument utilized in this study be re-used in a similar future study in an almost similar research locale in the Philippines, we recommend that the interview questions (especially question #15) be translated into a language that is better understood by the respondents. Many of the responses to question #15 were invalid due to lack of comprehension on the respondent's end. "What could be better..." was interpreted differently that instead of suggesting improvements, several responses stated the Nearpod features that they like better.

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We would like to express our utmost gratitude to everyone for their continuous support, mentorship, encouragement, trust, and support. This research work has helped us grow in many ways personally and professionally and we are grateful for the opportunity of taking this endeavor.

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Lastly, we would like to thank the students who are the reason for this research work. The success and accomplishment of this paper is ultimately for them. We hope to contribute more positive light to the education of our future generation through this and many more.

The Researchers

References

- Abu Musa, M.A and Al Momani, J.A. 2022. University Students' Attitudes towards using Nearpod Application in Distance Learning. *Journal of Education and e-Learning Research*. Volume 9, No.2, 110-118. DOI: 1020448/jelr.v9i2.4030. <https://files.eric.ed.gov/fulltext/EJ1352129.pdf>
- Adlet, K., Zhanagul, S., Tolkin, Y., Olga, F., Nazymgul, A., & Kadir, N. (2022). Interactive educational technologies as a factor in the development of the subjectivity of university students. *World Journal on Educational Technology: Current Issues*. 14(3), 533–543. <https://doi.org/10.18844/wjet.v14i3.7269>
- Anwar, F. (2019). The effect of activity-based teaching techniques on student motivation and academic achievement. *Journal of Education and Educational Development*, 6(1), 154-170
- Armstrong- Mensah, E, Ramsey-White, R., Yankey, B. and Self-Brown, S. (2020) Covid -19 and distance learning: Effects on Georgia State University School of Public health students. <https://doi.org/10.3389/fpubh.2020.576227>.
<https://www.frontiersin.org/articles/10.3389/fpubh.2020.576227/full>
- Asadi, N., Khodabandeh, F., & Yekta, R. R. (2019). Comparing and contrasting the interactional performance of teachers and students in traditional and virtual classrooms of advanced writing course in distance education university. *Turkish Online Journal of Distance Education*, 20(4), 135–148. Retrieved from <https://dergipark.org.tr/en/pub/tojde/issue/49972/640552>
- Daruwala, I., Bretas, S., & Ready, D. D. (2020). When logics collide: Implementing technology-enabled personalization in the age of accountability. *Educational Researcher*, 50(3), 157–164. <https://doi.org/10.3102/0013189x20960674>
- Dhawan, S. 2020. Online Learning: A Panacea in the Time of COVID-19 Crisis. *SAGE Journals*. Volume 49.Issue 1. <https://doi.org/10.1177/0047239520934018>
<https://journals.sagepub.com/doi/full/10.1177/0047239520934018#bibr1-0047239520934018>
<https://doi.org/10.1177/0047239520934018>

- Ertan, Kübra; Kocadere, Selay Arkün (2022). Gamification design to increase motivation in online learning environments: A systematic review. *Journal of Learning and Teaching in Digital Age*. <https://doi.org/10.53850/joltida.1020044>
- Fidalgo, P., Thormann, J., Kulyk, O & Lencastre, JA. (2020). Student's perceptions on distance education: a multinational study. *International Journal of Educational Technology in Higher Education*. Article number 18. <https://educationaltechnologyjournal.springeropen.com/articles/10.1186/s41239-020-00194-2>
- Ghani, Shehzad & Taylor, Maurice. (2021). Blended learning as a vehicle for increasing student engagement. *New Directions for Teaching and Learning*. 2021. 43-51. 10.1002/tl.20458.
- Hakami, Mohssen (2019). Using Nearpod as a Tool to Promote Active Learning in Higher Education in a BYOD Learning Environment. *Journal of Education and Learning*; Vol. 9, No. 1; 2020. ISSN 1927-5250 E-ISSN 1927-5269. doi:10.5539/jel.v9n1p119
- Havens, D. (2014). *Measuring Student Engagement with Learning Technology* [White paper]. Retrieved January 11, 2023 from Newschools Venture Fund: <https://cdn.nearpod.com/1447960561378/w3/pdf/Measuring-Student-Engagement-with-Learning-Technology.pdf>
- Huang, C.-H. (2021). Using PLS-SEM Model to Explore the Influencing Factors of Learning Satisfaction in Blended Learning. *Education Sciences*, 11(5), 249. <https://doi.org/10.3390/educsci11050249>
- Javed, Y., & Odhabi, H. (2018). Active learning in classrooms using online tools: Evaluating pear-deck for students' engagement. *2018 Fifth HCT information technology trends (ITT)* (vol. 1, pp. 126–131).
- Jørnø, R. L., Andersen, B. L., & Gundersen, P. (2022). The imaginary of personalization in relation to platforms and teacher agency in Denmark. *Nordic Journal of Studies in Educational Policy*, 8(1), 20–29. <https://doi.org/10.1080/20020317.2021.2022073>
- Kim, H. J., Yi, P., & Hong, J. I. (2020). Students' Academic Use of Mobile Technology and Higher-Order Thinking Skills: The Role of Active Engagement. *Education Sciences*, 10(3), 47. <https://doi.org/10.3390/educsci10030047>
- Koppitsch, S. E., & Meyer, J. (2021). DO POINTS MATTER? THE EFFECTS OF GAMIFICATION ACTIVITIES WITH AND WITHOUT POINTS ON STUDENT LEARNING AND ENGAGEMENT. *Marketing Education Review*, 32(1), 45–53. <https://doi.org/10.1080/10528008.2021.1887745>
- Kovalskys, G. 2015. Student Perspectives on Nearpod. *Student Surveys Give Nearpod High Ratings on Personalization, Creativity, and Collaboration*. <https://news.nearpod.com/pdf/student-perspectives-on-nearpod.pdf>

- Luo, Z. (2021). Gamification for educational purposes: What are the factors contributing to varied effectiveness? *Education and Information Technologies*, 27(1), 891–915.
<https://doi.org/10.1007/s10639-021-10642-9>
- Muthuprasad, T., Aiswarya, S., Aditya, K.S. and Jha, G.K. 2021. Student's perception and preference for online education In India during COVID-19 pandemic. *ELSEVIER. Social Sciences & Humanities Open*. Volume 3, Issue 1. <https://doi.org/10.1016/j.ssaho.2020.100101>
<https://www.sciencedirect.com/science/article/pii/S2590291120300905>
- Prihar, E., Haim, A., Sales, A., & Heffernan, N. (2022). Automatic interpretable personalized learning. *Proceedings of the Ninth ACM Conference on Learning @ Scale*.
<https://doi.org/10.1145/3491140.3528267>
- Putra, A.P, Arafik, M., and Pratiwi, I. (2021). Use of Nearpod to Enhance Engagement in Online Learning **DOI: 10.1109/ICET53279.2021.9575062**.
<https://ieeexplore.ieee.org/abstract/document/9575062>
- Salazar, JM.S., De Leon, JPD. and Legaspi, O.M. (2021). Experiences on Distance Learning of Selected Undergraduate Students of De La Salle University-Dasmariñas. *Academia Lasalliana Journal of Education and Humanities*. COVID Creases: A curriculum in Crisis.
https://www.researchgate.net/profile/Jhastine-Marie-Salazar/publication/358975891_Experiences_on_Distance_Learning_of_Selected_Undergraduate_Students_of_De_La_Salle_University_-_Dasmari%C3%B1as_COVID_Creases_A_Curriculum_in_Crisis_Special_Issue_in_Academia_Lasalliana_Journal_of_Educatio/links/62204546add1b367ae0f66df/Experiences-on-Distance-Learning-of-Selected-Undergraduate-Students-of-De-La-Salle-University-Dasmari%C3%B1as-COVID-Creases-A-Curriculum-in-Crisis-Special-Issue-in-Academia-Lasalliana-Journal-of-Educatio.pdf
- Saleem, A. N., Noori, N. M., & Ozdamli, F. (2021). Gamification Applications in E-learning: A Literature Review. *Technology, Knowledge and Learning*, 27(1), 139–159.
<https://doi.org/10.1007/s10758-020-09487-x>
- Scanlon, E. (2021). Educational Technology Research: Contexts, Complexity and Challenges. *Journal of Interactive Media in Education*, 2021(1): 2, pp. 1–12. DOI: <https://doi.org/10.5334/jime.580>
- Schlosser, L., Hood, C.E., Hogan, E., Baca, B.G., & Gentile-Mathew, A. (2022). Choosing the Right Educational Technology Tool for Your Teaching: A Data-Privacy Review and Pedagogical Perspective into Teaching with Technology. *Journal of Educational Technology Systems*, 51, 236 - 251.
- Serrano, D. R., Dea-Ayuela, M. A., Gonzalez-Burgos, E., Serrano-Gil, A., & Lalatsa, A. (2019). Technology-enhanced learning in higher education: How to enhance student engagement through blended learning. *European Journal of Education*, 54(2), 273-286.
- Simorangkir, D.S. (2018). The effect of online learning on students' metacognitive ability in mathematics learnings.

https://www.researchgate.net/profile/Dewi-Sartika-Simorangkir/publication/348298115_THE_EFFECT_OF_ONLINE_LEARNING_ON_STUDENTS_METACOGNITIVE_ABILITY_IN_MATHEMATICS_LEARNINGS/links/5ff6e09845851553a026e310/THE-EFFEC-T-OF-ONLINE-LEARNING-ON-STUDENTS-METACOGNITIVE-ABILITY-IN-MATH-EMATICS-LEARNINGS.pdf

Wong, Ruth. (2020). When no one can go to school: does online learning meet students' basic learning needs? DOI: 10.1080/10494820-2020.1789672.

<https://www.tandfonline.com/doi/abs/10.1080/10494820.2020.1789672>