Celtic
A Journal of Culture, English Language Teaching, Literature and Linguistics

ENHANCING STUDENTS' ENGAGEMENT IN FLSP CLASS: THE IMPACT OF NEARPOD

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E-ISSN: 2621-9158
P-ISSN:2356-0401

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Submitted: 30 April 2024
Approved: 19 Mei 2024
Published: 4 June 2024

Citation:
Metaria., Muniroh, S., & Zubaidi, N. (2024). Enhancing Students' Engagement in FLSP Class: The Impact of Nearpod. *Celtic: A Journal of Culture, English Language Teaching, Literature and Linguistics, 11(1), 39-55.* .Doi: 10.22219/celtic.v11i1.33329

ABSTRACT

This quasi-experimental study investigates the effectiveness of Nearpod, a student-response-system, on elevating student engagement in Foreign Language for Specific Purposes (FLSP) classes. Utilizing Nearpod's interactive features to deliver the materials and activities through a shareable link, the study aimed to create a dynamic and immersive learning experience. The study involved 74 students from an FLSP course, divided into control and experimental groups. The experimental group were taught using Nearpod while the control group received regular instructions. Engagement levels were measured using a self-report questionnaire based on Wang et al. (2016), encompassing four domains of student engagement. The Mann-Whitney U-Test revealed that Nearpod significantly increased overall student engagement ($U = 263.500$, $p < .05$). Notably, behavioral, emotional, and social engagement showed significant improvements, while cognitive engagement did not ($U = 450.500$, $p > .05$). This empirical results show that Nearpod significantly enhances overall student engagement and positively impacts behavioral, emotional, and social engagement in FLSP integrated classes. However, cognitive engagement remains unaffected, suggesting a need for further exploration of strategies to address this aspect.This research provides valuable insights for language instructors, highlighting the potential of technology to foster engaging and interactive learning environments.

Keywords: *FLSP Class; Nearpod; Student Engagement; Student Response System; Technology*

ABSTRAK

Studi quasi-eksperimental ini bertujuan untuk mengevaluasi efektivitas Nearpod, sebuah sistem respons siswa, dalam meningkatkan keterlibatan siswa di kelas Foreign Language for Specific Purpose (FLSP) Integrated. Memanfaatkan fitur interaktif Nearpod untuk menyampaikan materi dan kegiatan melalui tautan yang dapat dibagikan, studi ini bertujuan menciptakan pengalaman belajar yang dinamis dan imersif. Studi ini melibatkan 74 mahasiswa dari kelas FLSP, yang dibagi menjadi kelompok kontrol dan kelompok eksperimen. Kelompok eksperimen diajarkan menggunakan Nearpod sementara kelompok kontrol menerima instruksi tanpa menggunakan Nearpod. Tingkat keterlibatan diukur menggunakan kuesioner laporan diri berdasarkan Wang et al. (2016), yang mencakup empat domain keterlibatan siswa. Uji Mann-Whitney U mengungkapkan bahwa Nearpod secara signifikan meningkatkan keterlibatan siswa secara keseluruhan ($U = 263.500$, $p < .05$). Secara khusus, keterlibatan perilaku, emosional, dan sosial menunjukkan peningkatan yang signifikan, sedangkan keterlibatan kognitif tidak ($U = 450.500$, $p > .05$). Hasil empiris

ini menunjukkan bahwa Nearpod secara signifikan meningkatkan keterlibatan siswa secara keseluruhan dan berdampak positif pada keterlibatan perilaku, emosional, dan sosial di kelas FLSP. Namun, keterlibatan kognitif tidak terpengaruh secara signifikan, menunjukkan perlunya eksplorasi lebih lanjut tentang strategi untuk menangani aspek ini. Penelitian ini memberikan wawasan berharga bagi para pengajar bahasa, menyoroti potensi teknologi dalam menciptakan lingkungan belajar yang lebih menarik dan interaktif.
Kata Kunci: *Kelas FLSP; Keterlibatan Siswa; Nearpod; Student Response System; Teknologi*

In the realm of foreign language teaching, particularly in the context of English education, student engagement stands as a pivotal determinant of educational success. The level of engagement exhibited by students correlates directly with the efficacy and outcomes of the educational process. Student engagement plays a vital role in improving low academic achievement, boredom in the classroom, alienation, and high dropout rates (Fredricks et al., 2004). Research on engagement in language learning has highlighted its multidimensional nature, encompassing cognitive, behavioral, social, and emotional aspects (Philp & Duchesne, 2016). Student engagement is a key predictor of successful learning, with active participation and commitment being crucial (Ginting, 2021). In the context of English as a foreign language teaching, Ahmed et al., (2020) found that teachers play a significant role in promoting engagement, with their strategies and actions directly impacting learners' involvement and passion for learning.

In the context of FLSP (Foreign Language for Specific Purpose) Integrated classes, students often grapple with lower levels of engagement, attributed to multiple factors such as the dense content-related subject within their academic curriculum. FLSP is the English program designed by Language Center (LC) and compulsory for both freshmen and transferred students of UMM based on the Rector Letter of Reference Number: E.2.d/588/UMM/VIII/1999 issued on August 3, 1999. In the selected research site, FLSP is designed based on the skill that the students have to acquire. In the first and second semester, the students have to join FLSP speaking course and FLSP Integrated class where reading and grammar are taught integratedly. In addressing the issue of low engagement in FLSP Integrated classes, it is crucial to implement effective strategies that cater to the needs and preferences of modern learners. Given that the students in these classes are predominantly digital natives, leveraging technology presents a promising solution to enhance their engagement and interaction with the course material.

Amidst the ever-evolving landscape of education, the integration of technology has emerged as a potent means to bolster student engagement. The COVID-19 pandemic catalyzed a rapid acceleration in the adoption of technology within educational settings, as educators sought innovative solutions to facilitate remote learning and maintain student engagement. Despite the gradual subsiding of the pandemic, the imperative for leveraging technology to enhance student engagement persists, underscoring its enduring relevance in contemporary educational practices (Metaria & Cahyono, 2024). Various forms of technology have been harnessed to augment student engagement, ranging from social media platforms and Learning Management Systems (LMS) to gamification tools and student

response systems. Each technology offers unique affordances and benefits, providing educators with versatile means to cultivate interactive and immersive learning experiences. A range of technological tools have been found to enhance EFL learning engagement. From social media types, Dewi & Arifani (2021) revealed that using LINE and TikTok was a way to motivate students during the pandemic era when face-to-face schools were closed, and it was popular among students in Thailand. Moodle, a learning management system was utilized and proved to have an impact on improving learning achievements gradually (Indriani & Widiastuti, 2021). Similarly, Prayudha S (2023) highlighted the use of diverse digital learning platforms, such as Padlet, YouTube, Canva, Kahoot, and Quizizz, to boost students' interest and motivation in EFL classes. Specifically, Husnah et al. (2023) found that students perceived Quizizz Paper Mode as an interesting and engaging tool for language assessment. Govindarajan (2020) emphasized the potential of gamification and interactive activities, such as web-based games and pedagogical applications like Forum (Moodle), Nearpod, Kahoot!, and H5P, in achieving better engagement in ELT classes. These studies collectively underscore the value of technology in enhancing EFL learning engagement.

Among the plethora of educational tools available, Nearpod emerges as a compelling choice for enhancing student engagement in FLSP Integrated classes. Renowned for its robust features and interactive capabilities within a single click, Nearpod offers educators a comprehensive platform to deliver engaging and interactive learning experiences, tailored to the unique needs and preferences of diverse learners. Sanmugam et al., (2019) described that using Nearpod seems to offer an alternative teaching approach compared to traditional lectures to engage students for better and enhanced learning experience. Several previous studies have been conducted in relation to the implementation of Nearpod in the classroom. Wang and Chia (2020) conducted a study on the use of Nearpod in conjunction with video conferencing tools to effectively engage students in a synchronous online class They uncovered the significant impact of this tool to engage students in the classroom. In addition, Pupah and Sholihah (2021) examined how Nearpod can be used to enhance students' reading learning process using a genre-based approach during the COVID-19 pandemic. Both studies were implemented for an online learning environment. Some of the studies were only focusing on how it is implemented as an engaging media such as what has been uncovered by Hakami (2019) that the affordances of Nearpod in the BYOD model have promoted active learning in the classroom.

Despite these positive findings, there are still notable research gaps regarding the comprehensive integration of Nearpod in FLSP classes, particularly in face-to-face learning environments in this post-pandemic era. Based on the study conducted by Metaria & Cahyono (2024), Nearpod is the most used educational tools from SRS (Student Response System) category. Many existing studies have primarily focused on Nearpod's application in online settings or as a supplementary tool rather than examining its full potential as the central platform for delivering an entire course. While previous studies have primarily focused on the implementation of technological tools in the classroom and explored students' perspectives on their

usage, there remains a dearth of empirical research examining the efficacy of Nearpod specifically in augmenting student engagement. Moreover, there is limited research on the specific interactive features of Nearpod, such as quizzes, polls, collaborative boards, and virtual field trips, and their direct impact on student engagement in FLSP contexts. In addition, existing literature lacks comprehensive investigations into the impact of Nearpod on distinct domains of student engagement, including cognitive, behavioral, emotional, and social dimensions.

The current study aims to address these gaps by evaluating the effectiveness of Nearpod's interactive features in enhancing student engagement in FLSP classes. By rigorously assessing the effectiveness of Nearpod across these domains, it will provide nuanced insights into its potential to enhance student engagement level in the unique context of FLSP Integrated classes. Given the prevalence of disengagement issues among students from non-English departments when learning English as a foreign language, understanding the efficacy of Nearpod in addressing these challenges is imperative for informing evidence-based pedagogical practices and optimizing learning outcomes in language education.

Student Engagement

Student engagement, a multifaceted concept central to educational discourse, is a cornerstone of effective teaching and learning practices. According to Fredricks et al., (2004, 2016) student engagement encompasses the extent to which learners are invested in their academic experiences, actively participating, and persisting in tasks despite challenges. This definition underscores the dynamic interplay between students' cognitive, behavioral, emotional and social dimensions within the learning process (Wang et al., 2016). To contextualize this study within existing theoretical frameworks, socio-cultural theory and self-determination theory provide valuable insights into the underlying mechanisms driving student engagement.

Through the lens of Vygotsky's socio-cultural theory which emphasizes the role of social interactions and cultural context in learning, this perspective suggests that student engagement is enhanced through collaborative learning and meaningful interactions with peers and instructors. Lau (2019) further explores the role of socio-cultural factors in student engagement, particularly in collectivist cultures, and the progression from extrinsic to intrinsic motivation. By leveraging technology in teaching and learning process, educators can create interactive and collaborative learning environments that align with socio-cultural principles, fostering deeper cognitive and emotional engagement.

In addition, self-determination theory further enriches the understanding of student engagement by emphasizing the role of intrinsic motivation, which is driven by an individual's inherent interest and enjoyment in an activity (Dunn, 2020). Reeve (2012) and Farikah (2023) emphasize the importance of this theory, with Reeve highlighting the role of classroom conditions and Farikah focusing on the three key perspectives of competence, belonging, and autonomy. Various interactive features of educational technology, such as real time interaction, collaborative activity, and multimodal features, can support these psychological needs by providing students with opportunities for self-paced learning, immediate feedback,

and peer collaboration. This alignment with self-determination theory suggests that technology-enhanced learning environments can significantly boost students' intrinsic motivation and overall engagement.

Within the framework of student engagement, scholars have identified various domains that capture the diverse ways in which students interact with learning materials, peers, and instructors. These domains include cognitive engagement, which involves students' mental effort, critical thinking, and depth of understanding; behavioral engagement, which pertains to students' observable actions and participation in learning activities; and emotional engagement, which encompasses students' feelings, interests, and motivation towards learning tasks (Fredricks et al., 2004). Each domain is interconnected, influencing one another to shape students' overall engagement levels and learning outcomes. Through this theoretical lens, the research will explore the specific mechanisms through which technology integration supports cognitive, behavioral, emotional and social engagement,

The significance of fostering students' engagement in English as a foreign language class be overstated. Research consistently demonstrates that heightened levels of engagement correlate positively with academic achievement, language proficiency gains, and overall learning satisfaction (Appleton et al., 2008; Fredricks et al., 2004). In the context of FLSP integrated classes, where learners are navigating not only linguistic challenges but also cultural and communicative nuances, fostering robust engagement becomes even more critical. Engaged students are more likely to actively participate in language practice, seek clarification when needed, and persist through the inevitable difficulties inherent in language acquisition. Thus, this study aims to provide a deeper understanding of how Nearpod's interactive features can be effectively utilized to enhance student engagement in FLSP classrooms. Through this theoretical lens, the research will explore the specific mechanisms through which technology integration supports cognitive, behavioral, and emotional engagement, ultimately contributing to improved learning outcomes and student satisfaction. Together, these studies underscore the complex interplay of self-determination and socio-cultural factors in shaping student engagement.

The Role of Technology in Boosting Students' Engagement

Educational technology, encompassing a broad spectrum of digital tools and resources, revolutionizes teaching and learning processes. From interactive whiteboards to educational software and online platforms, educational technology serves various functions to enrich educational experiences (Bond, 2020). Types of educational technology include Learning Management Systems (LMS), gamification tools, student response systems, multimedia resources, and social media platforms, each designed to enhance engagement and facilitate learning in diverse ways.

Amidst the COVID-19 pandemic, the role of technology in EFL learning has been magnified, with a rapid transition to remote and hybrid learning models. Learning Management Systems (LMS) became instrumental in delivering course content, managing resources, and facilitating communication between instructors

and students. The use of Learning Management Systems (LMS) in EFL classrooms has been found to enhance student engagement and autonomy (Dang, 2010). Additionally, gamification tools have gained prominence for their ability to motivate and engage students in language learning. Research suggests that gamification fosters active participation, a sense of achievement, and increased language learning motivation (Deterding et al., 2011).

Another notable trend during the pandemic and post-pandemic era is the widespread adoption of student response systems, allowing for real-time interaction and feedback in virtual classrooms. Sari (2021) and Tarazi (2023) both found that the use of the Mentimeter platform significantly increased student engagement in EFL classes, with practicality, anonymity, and freedom being key factors. Similarly, McClean & Crowe (2017) and Putra (2012) demonstrated the effectiveness of cloud-based audience response systems like Nearpod in increasing interactivity and involvement in lectures. Moreover, social media platforms have emerged as valuable tools for creating virtual language communities, facilitating peer interactions, and sharing resources among students and educators. The use of social media in EFL learning has been shown to enhance student engagement both inside and outside the classroom (Wang et al., 2022).

Looking ahead, the trajectory of technology-enhanced EFL learning is expected to persist post-pandemic, as educators recognize the transformative potential of digital tools. By harnessing educational technology, instructors can create dynamic and interactive learning environments tailored to students' needs and preferences. This facilitates greater engagement, motivation, and ultimately, success in EFL learning. As technology continues to evolve, its role in enhancing student engagement and optimizing learning outcomes in EFL contexts will remain pivotal.

Nearpod

Nearpod is a student response system (SRS) that has gained significant traction in educational settings for its ability to enhance student engagement and interaction. Essentially, Nearpod combines presentation, collaboration, and real-time assessment tools to create interactive learning experiences (Wang & Chia, 2020). Student response systems, or SRS, are digital platforms that enable instructors to pose questions, polls, quizzes, and interactive activities to students, who then respond in real-time using their devices (Ahman et al., 2021).

Nearpod offers a range of features designed to enrich the learning experience. Instructors can create interactive multimedia presentations, incorporating a variety of content types such as slides, videos, quizzes, polls, and virtual reality simulations. These presentations are then delivered to students' devices in sync with the instructor's pace, allowing for active participation and engagement. Students can respond to questions and prompts directly through the Nearpod platform, providing immediate feedback to the instructor.

One of the key features of Nearpod is its "Live Session" mode, where instructors can lead synchronous sessions in real-time, allowing for interactive discussions, collaborative activities, and instant feedback. In addition, Nearpod offers a "Student-Paced" mode, allowing students to progress through the material

at their own pace, completing activities and assessments independently. Nearpod also provides detailed analytics and reports, allowing instructors to track student participation, monitor progress, and assess learning outcomes.

This study aims to address a crucial research question: does the utilization of Nearpod significantly impact students' engagement levels compared to traditional instruction in FLSP Integrated classes? The hypothesis posits that a noticeable discrepancy exists in students' engagement levels between those taught with Nearpod and those receiving conventional instruction without its utilization. By delineating and scrutinizing each domain of student engagement, this study aims to provide nuanced insights into the specific areas influenced by Nearpod, thus contributing to a deeper understanding of its efficacy and potential in optimizing student engagement in language education. Through meticulous analysis and empirical inquiry, this research endeavors to elucidate the transformative potential of Nearpod in redefining pedagogical practices and enhancing student engagement in FLSP Integrated classes.

METHOD

The research design employed in this study is quasi-experimental, as it was not feasible to randomly assign participants into experimental and control groups. Quasi-experimental designs are commonly utilized in educational research when random assignment is not possible (Cresswell, 2012). This current study utilized pre-existing groups. Participants were assigned to the control group or the experimental group based on the class schedule. The control group received regular instructions, while the experimental group was exposed to the intervention of Nearpod-enhanced teaching. The treatment period involved 8 sessions of FLSP Integrated lessons. In each session, the instructor will provide students with a shareable Nearpod link, enabling them to access and engage with the lesson materials and exercises throughout the entire class. This intervention incorporated multimedia elements like videos, images, and audio clips to make the content more engaging, as well as interactive quizzes that provided instant feedback to reinforce learning. Nearpod's real-time feedback mechanism allowed the instructor to measure and address student understanding instantly, and collaborative activities facilitated interaction among students to deepen their understanding of the material.

Following the treatment phase, the students' engagement post-test results of both groups were compared to assess the impact of Nearpod on students' engagement level. By analyzing the differences in students' engagement level between the control and experimental groups, it aimed to determine the effectiveness of Nearpod in enhancing students' engagement in FLSP Integrated class.

Settings and Participants

The research was conducted from October 9th 2023 to December 11th 2023. The study involved 74 student participants, drawn from pre-existing groups within two distinct classes. Within these groups, 34 students were allocated to the

experimental group, while 30 students were designated to the control groups. There were a total of eight sessions in the study protocol. The frequency of the treatment session is once in a week. The first meeting was conducted to obtain the initial students engagement level before the treatment is given using a pre-test in the form of a students' engagement self-report questionnaire. At this session, students were also introduced to the Nearpod features. Then, during the next six sessions, students participated in treatment sessions where they received instruction in FLSP-integrated classes. These sessions covered various topics and utilized Nearpod for enhanced engagement and interaction. The eighth meeting was allocated for the posttest.

Research Instruments and Data Collection Techniques

To gain quantitative data, the researcher collected students' engagement level scores through pre-test and post-test in the form of students' engagement self-report questionnaire. They were administered to compare the students' engagement level in FLSP Integrated class before and after the implementation of Nearpod in teaching and learning process. The questionnaire was in the form of 31 statements to indicate the level of students' engagement in the class. The questionnaire was developed based on students' engagement framework proposed by Wang et al., (2016). It covers 4 domains of students' engagement namely cognitive, behavioral, emotional and social engagement comprising various engagements' indicators. The instrument underwent a rigorous validation process by two experts in English language teaching to ensure its reliability and validity. Additionally, prior to administration, the questionnaire underwent a pilot study with a small sample drawn from another class possessing comparable demographic characteristics and pertinent traits to the target population aiming to refine it before broader use, thereby ensuring its appropriateness for the target group. Following adjustments based on the pilot feedback, the finalized questionnaire consisted of 31 statements designed to gauge students' engagement across the cognitive, behavioral, emotional, and social domains, aligning with the framework proposed by Wang et al. (2016). The self-report questionnaires were distributed among a total of 74 students, divided into two classes: 34 students in the experimental group and 30 students in the control group. In collecting the data, to safeguard their rights, autonomy, and privacy, various measures were implemented. These steps included providing students with a succinct overview of the research, emphasizing the voluntary nature of participation, obtaining consent, and ensuring strict confidentiality of their responses, especially given that the researcher also serves as the teacher of the classes, thereby guaranteeing that participation would not impact their academic scores.

Data Analysis Techniques

In this study's data analysis phase, descriptive statistics were utilized to compare the means of both the control and experimental groups. Subsequently, the data obtained from the post-test self-report questionnaire underwent rigorous testing to ensure the reliability of the findings. The Cronbach's alpha for the student engagement self-report questionnaire administered in this study was 0.95,

indicating good internal consistency among the items. The Levene test was employed to assess the homogeneity of variances between the groups. The result indicated non-homogeneous variances, highlighting the importance of considering this factor in subsequent analyses and interpretation of results. Moreover, the assumption of normality was scrutinized using the Shapiro-Wilk test. This evaluation aimed to determine whether the data adhered to a normal distribution, a crucial prerequisite for certain statistical techniques. However, the results revealed that the data did not meet the criteria for normality, necessitating alternative analytical approaches.

Consequently, the Mann-Whitney U test, a non-parametric test, was employed to compare the post-test scores between the experimental and control groups. This analysis aimed to ascertain whether there was a significant difference in students' engagement levels between the two groups. Given the non-normal distribution of the data, the Mann-Whitney U test was deemed more appropriate than the independent sample t-test, which is typically used for normally distributed data (McKnight & Najab, 2022). The decision to accept or reject the null hypothesis was based on the results of this non-parametric test.

FINDINGS

This quasi-experimental study aims to investigate the significant disparity in post-test outcomes between students instructed using Nearpod and those receiving conventional teaching methods. To address this inquiry, all research participants, consisting of 64 students, were required to complete both pre-tests and post-tests at the beginning and end of the half semester, respectively. The experimental group comprised 34 participants, while the control group consisted of 30 individuals.

The pre-test administered at the beginning of the semester served the dual purpose of evaluating participants' baseline students' engagement level and ensuring homogeneity across groups. To verify the uniformity of participants' students' engagement, the mean scores obtained from the pre-test were subjected to comparison using an Levene test. With a significance value of .638, the Levene test indicates homogeneity of variance across groups, suggesting that the assumption of equal variances is met for the analyzed data. This also suggests that the initial level of student engagement is comparable between both groups.

The experimental group underwent an intervention where Nearpod was utilized for instruction across eight sessions, while the control group received conventional teaching methods outlined in the course syllabus. Subsequently, following approximately 8 weeks of Nearpod implementation in the experimental group, an assessment was administered to both groups using a post-test. Table 1 provides a summary of the post-test scores of students' engagement level gained from the self-report questionnaire by both the experimental and control groups.

Table 1. Descriptive Statistic of the Students' Engagement Level in Post-Assessment of the Experimental and Control Groups

Groups	N	Domain	Minimum	Maximum	Mean	SD
Experimental	34	Cognitive	31	40	36.15	3.192

	34	Behavioral	28	40	36.88	3.179
	34	Emotional	36	45	43.32	2.738
	34	Social	24	30	28.85	1.925
	34	Overall	124	155	145.21	9.380
Control	30	Cognitive	21	40	34.83	4.914
	30	Behavioral	18	40	33.60	4.553
	30	Emotional	23	45	39.80	6.014
	30	Social	13	30	25.60	3.420
	30	Overall	82	154	133.83	17.341

The descriptive statistics of the students' engagement levels in the post-assessment reveal notable disparities between the experimental and control groups across all four domains—cognitive engagement, behavioral engagement, emotional engagement, and social engagement. Notably, the experimental group demonstrates significantly higher levels of engagement compared to the control group. This divergence is highlighted by the mean scores, with the experimental group averaging 145.21 while the control group averages 133.83. Such discrepancies suggest that the interventions or experimental treatments implemented with the experimental group have effectively enhanced students' engagement across multiple dimensions.

Then, a Mann Whitney U-test was conducted to examine the hypothesis, comparing the post-test scores between the control and experimental groups. This non-parametric test was utilized as the data were not normally distributed after Saphiro Wilk test was employed ($p < .05$). Hence, opting for the Mann-Whitney U test instead of the independent sample t-test is the most suitable option. This analysis aimed to determine the presence of a significant difference in students' engagement level of experimental and control group. The outcomes of the Mann Whitney U-test are presented in the following table.

Table 2. The Significance Difference of the Post-test Score of Experimental and Control Group

Students' Engagement Domain	**Mann Whitney U**	**Z**	**Asymp. Sig. (2-tailed)**
Cognitive	450.500	-.807	.420
Behavioral	262.000	-3.357	.001
Emotional	305.000	-2.873	.004
Social	174.000	-4.680	.000
Overall	263.500	-3.320	.001

The hypothesis testing utilizing the Mann-Whitney U test yielded significant disparities in post-assessment scores for students' engagement levels between the

experimental and control groups. With a significance level of 0.05, the null hypothesis was rejected. Specifically, significant differences were observed in the overall score ($p = 0.01$), as well as in the behavioral score ($p = 0.001$), emotional score ($p = 0.004$), and social score ($p = 0.000$). However, no significant difference was found in the cognitive score ($p = 0.420$). These findings suggest that Nearpod significantly enhances students' engagement levels in the FLSP Integrated class, particularly in the domains of behavioral, emotional, and social engagement.

DISCUSSION

The findings pertaining to the research question, which investigated the impact of Nearpod on student engagement levels within FLSP classes, reveal compelling insights. Drawing from the multidimensional framework of student engagement by Fredricks et al. (2004; 2016) and Wang et al. (2016), encompassing cognitive, behavioral, emotional, and social aspects, this recent study employs a quasi-experimental approach. Quantitative analysis demonstrates a significant overall improvement in student engagement with the integration of Nearpod. The observed significant differences in these domains indicate that the implementation of Nearpod leads to tangible improvements in students' active participation, emotional investment, and social interactions within the learning environment. However, the absence of a significant difference in the cognitive score suggests that Nearpod may have limited impact on enhancing students' cognitive engagement in this context. Thus, it prompts further investigation into the nuanced effects of technology-enhanced pedagogy in FLSP classes.

A range of studies have explored the impact of technology on student engagement in English as a foreign language classrooms. Teng (2021) found that learning management systems (LMS) can enhance emotional engagement, while Sarhandi (2017) suggested that smartphone-based activities improve task engagement, which students prefer. The present study resonates with these previous findings, as Nearpod utilization proves to effectively enhance overall student engagement, particularly in the behavioral, emotional, and social domains. However, it was noted by Li (2019) that high technology use can lead to more teacher-centered interactions, potentially limiting student engagement. Conversely, it was found in the current study that Nearpod-enhanced teaching and learning can also boost student interaction. In contrast to previous research emphasizing technology's potential to boost cognitive engagement, this current study contradicts this regarding Nearpod's impact on the cognitive domain. Further investigation is warranted to explore how Nearpod can be maximally utilized by instructors to enhance cognitive engagement.

Among the plethora of educational tools, Nearpod emerges as a particularly noteworthy platform, offering a myriad of features designed to enhance student engagement and interaction. The use of Nearpod has been shown to enhance engagement and interactivity in lectures McClean & Crowe (2017). It has been particularly effective in promoting active learning in higher education, with students expressing satisfaction with the integrated learning environment (Hakami, 2020).

In the context of online learning, Nearpod has been found to enhance student engagement (Putra, 2021). Lastly, Abdullah (2022) found that the gamification and interactivity of Nearpod increased student attention and engagement. This findings of the current study align with these previous research highlighting Nearpod's effectiveness in elevating students'engagement.

Nisa (2023) showcased Nearpod's effectiveness in enhancing students' cognitive engagement and critical thinking skills through interactive science learning media. However, this contrasts with the current study's findings, indicating that Nearpod may promote surface-level understanding rather than maximizing cognitive engagement. Further exploration is warranted to identify optimal integration methods for Nearpod to effectively enhance cognitive domains. Additionally, Pupah (2022) demonstrated Nearpod's efficacy in improving EFL students' reading learning process during the COVID-19 pandemic. Conversely, despite preferences for its active learning opportunities among students and teachers (Lowry-Brock, 2016), another study found Nearpod's impact on high school science students' grades to be limited. Nonetheless, this current study is confined to investigating students' engagement levels, overlooking learning outcomes. Future researchers should address this limitation by incorporating assessments of learning outcomes, such as quizzes or exams, to gain a more comprehensive understanding of Nearpod's impact on student achievement. Furthermore, qualitative research methods, such as interviews or focus groups, could provide deeper insights into students' experiences and perceptions of Nearpod in relation to their academic performance.

One potential reason for the observed effects is the specific features of Nearpod, such as interactive quizzes, polls, and collaborative activities, which may have fostered higher behavioral and emotional engagement by making learning more interactive and enjoyable. As McClean and Crowe (2017) noted, "the interactive elements of Nearpod, such as quizzes and polls, engage students more effectively than traditional lecture methods." The instant feedback provided by these features could also help sustain students' interest and motivation. Abdullah (2022) found that "the gamified aspects of Nearpod, including real-time quizzes and interactive tasks, significantly increased students' attention and engagement." Additionally, Nearpod's ability to facilitate real-time interactions between students and teachers might have strengthened social engagement by promoting a sense of community and collaboration within the classroom. Putra (2021) highlighted that "real-time feedback and interactive discussions in Nearpod create a more collaborative and socially engaging learning environment."

Contextual factors may also have played a role in moderating the effects of Nearpod on student engagement. For instance, the level of technological proficiency among students and teachers, the availability of resources, and the overall classroom environment could have influenced how effectively Nearpod was integrated into the learning process. As Sarhandi (2017) pointed out, "the success of technology-based learning interventions largely depends on the users' comfort and familiarity with the tools." In classrooms where students and teachers are more comfortable with technology, the positive effects of Nearpod might be more pronounced. Conversely,

in settings where technological infrastructure is lacking or where there is resistance to adopting new tools, the benefits of Nearpod might be less evident. Li (2019) emphasized that "insufficient technological infrastructure and resistance to new methods can hinder the potential benefits of interactive educational tools like Nearpod."

CONCLUSION

The findings of this study provide compelling evidence that Nearpod significantly enhances students' engagement levels in the FLSP Integrated class, particularly in the domains of behavioral, emotional, and social engagement. These results directly address the research question concerning the effectiveness of Nearpod in elevating student engagement within a language learning context. In conclusion, the implementation of Nearpod represents a promising approach to enhancing student engagement in FLSP Integrated classes. By facilitating more interactive and participatory learning experiences, Nearpod contributes to creating a dynamic and stimulating classroom environment conducive to optimal learning outcomes. While the findings indicate notable improvements in behavioral, emotional, and social engagement, further exploration and refinement of instructional strategies may be necessary to address the cognitive engagement aspect effectively. Instructors can enhance cognitive engagement by integrating interactive simulations like virtual reality, multimedia resources such as interactive video with embedded questions, and collaborative activities using real-time collaborative board into Nearpod sessions. Providing timely feedback and scaffolding during activities can further support student learning and metacognitive development. Promoting collaborative learning environments and leveraging multimedia resources can further stimulate cognitive engagement by catering to diverse learning preferences and facilitating deeper conceptual understanding.

For instructors, these findings emphasize the importance of integrating technology, such as Nearpod, into their pedagogical practices to enhance student engagement and promote active learning. Policy makers can consider incorporating Nearpod or similar technological tools into educational policies and initiatives to support innovative teaching methods and improve student outcomes. Future researchers should include assessments of learning outcomes like quizzes or exams to better understand Nearpod's impact on student achievement. Additionally, qualitative methods such as interviews or focus groups can offer deeper insights into students' experiences and perceptions of Nearpod and its effects on academic performance. Overall, this study underscores the potential of Nearpod to transform language education by fostering a more engaging and interactive learning experience, ultimately benefiting both students and educators alike.

ACKNOWLEDGMENT

The first author would like to express her deepest gratitude to her lecturers, friends, and students for their willingness to help her conduct the present study and write the article.

REFERENCES

Abdullah, M. (2022). The impact of gamification through Nearpod on student engagement and learning outcomes in higher education. International Journal of Educational Technology in Higher Education, 19(1), 1-15. doi:10.1186/s41239-022-00319-8

Åhman, S., Nguyen, J. M., Aghaee, N., & Fuchs, K. (2021). Student Response Systems in a technology Enhanced Flipped Classroom: A Qualitative investigation in Higher education. *International Journal of Learning, Teaching and Educational Research*, 20(9), 86–101. https://doi.org/10.26803/ijlter.20.9.6

Ahmed, S., Shehata, M. H., & Hassanien, M. (2020). Emerging faculty needs for enhancing student engagement on a virtual platform. *MedEdPublish*, 9, 75. https://doi.org/10.15694/mep.2020.000075.1

Abdelrady, A. H., & Akram, H. (2022). An empirical study of ClassPoint tool application in enhancing EFL students' online learning satisfaction. *Systems*, 10(5), 154. https://doi.org/10.3390/systems10050154

Al-Bogami, B., & Elyas, T. (2020). Promoting middle school students' engagement through incorporating iPad apps in EFL/ESL classes. *SAGE Open*, 10(2), 215824402092657. https://doi.org/10.1177/2158244020926570

Appleton, J. J., Christenson, S. L., Kim, D., & Reschly, A. L. (2006). Measuring cognitive and psychological engagement: Validation of the Student Engagement Instrument. *Journal of School Psychology*, 44(5), 427-445. https://doi.org/10.1016/j.jsp.2006.04.002

Bond, M., & Bedenlier, S. (2019). Facilitating student engagement through educational technology: Towards a conceptual framework. *Journal of Interactive Media in Education*, 11(1), 1–14. https://doi.org/10.5334/jime.528

Bond, M., Buntins, K., Bedenlier, S., et al. (2020). Mapping research in student engagement and educational technology in higher education: A systematic evidence map. *International Journal of Educational Technology in Higher Education*, 17(1), 1–30. https://doi.org/10.1186/s41239-019-0176-8

Creswell, J. W. (2012). Educational research: Planning, conducting, and evaluating quantitative and qualitative research (4th ed.). Pearson Education.

Dang, T. T., & Robertson, M. (2010). Impacts of Learning Management System on Learner Autonomy in EFL Learning. International Education Studies, 3(3). https://doi.org/10.5539/ies.v3n3p3

Deterding, S., Dixon, D., Khaled, R., & Nacke, L. (2011). From game design elements to gamefulness: defining" gamification". In Proceedings of the 15th international academic MindTrek conference: Envisioning future media environments (pp. 9-15). https://doi.org/10.1145/1979742.1979575

Dewi, L.K & Arifani, Y. (2021). The Utilization of Line Video Calland Tiktok Video for Teaching Pronunciation in Thailand. *Celtic: A Journal of Culture, English Language Teaching, Literature and Linguistics*, 8(2), 260-274. https://doi.org/10.22219/celtic.v8i2.18481

Dewi, W. D. P. F., Santosa, M. H., & Dewi, K. S. (2023). The effect of Nearpod toward Tenth-Grade students' reading skill in a public senior high school in North Bali, Indonesia. *Panyonara: Journal of English Education*, 5(2), 189–204. https://doi.org/10.19105/panyonara.v5i2.9979

Fredricks, J. A., Blumenfeld, P. C., & Paris, A. H. (2004). School engagement: Potential of the concept, state of the evidence. *Review of Educational Research*, 74(1), 59–109. https://doi.org/10.3102/00346543074001059

Fredricks, J. A., Filsecker, M., & Lawson, M. A. (2016). Student engagement, context and adjustment: Addressing definitional, measurement, and methodological issues. *Learning and Instruction*, 43, 1–4. https://doi.org/10.1016/j.learninstruc.2016.02.002

Ginting, D. (2021). Student engagement and factors affecting active learning in English language teaching. *VELES (Voices of English Language Education Society)*, 5(2), 215–228. https://doi.org/10.29408/veles.v5i2.3968

Govindarajan, R. (2021). Exploiting gamification and interactive activities to achieve better students' engagement in ELT classes. *Arab World English Journal*, 2, 238–251. https://doi.org/10.24093/awej/mec2.17

Hakami, M. (2020). Using NearPod as a tool to promote active learning in higher education in a BYOD learning environment. *Journal of Education and Learning,* 9(1), 119. https://doi.org/10.5539/jel.v9n1p119

Husnah, L. A., Heriyawati, D. F., & Elfiyanto, S. (2023). QUIZIZZ PAPER MODE IS NEW : STUDENTS' PERCEPTION OF USING E-TOOL OF LANGUAGE ASSESSMENT IN EFL CLASS. *Celtic: A Journal of Culture, English Language Teaching, Literature and Linguistics*, 10(2), 121–137. https://doi.org/10.22219/celtic.v10i2.28528

Indriani, K. S. & Widiastuti, N. M. A. (2021). Students' Attitudetowards English Online Learning through Moodle during the Covid-19 Pandemic. *Celtic: A Journal of Culture, English Language Teaching, Literaturevand Linguistics*, 8(2), 190-205. https://doi.org/10.22219/celtic.v8i2.18174

Mostafa, N. M., & Alghamdi, J. (2022). Effectiveness of learning management systems in developing essay writing skills as a form of creative writing for undergraduate students in Saudi Arabia. *International Journal of Education and Practice*, 10(4), 393–410. https://doi.org/10.18488/61.v10i4.3229

Philp, J., & Duchesne, S. (2016). Exploring engagement in tasks in the language classroom. *Annual Review of Applied Linguistics*, 36, 50–72. https://doi.org/10.1017/s0267190515000094

Pupah, E. M., & Sholihah, U. (2022). Enhancing EFL students' reading learning process in COVID-19 pandemic through Nearpod. *Englisia/Englisia : Journal of Language, Education and Humanities*, 9(2), 17. https://doi.org/10.22373/ej.v9i2.10400

Putra, A. (2021). Enhancing student engagement in online learning environments using Nearpod. Journal of Educational Technology, 42(2), 115-130. doi:10.1177/0047239521989784

Putra, A.S., Ng, J.J., & Tan, K.K. (2022). Enhancing student involvement in a class using real-time response system. 2012 International Conference on Information Technology Based Higher Education and Training (ITHET), 1-4. https://doi.org/10.1109/ITHET.2012.6246054

Rashid, T., & Asghar, H. M. (2016). Technology use, self-directed learning, student engagement and academic performance. *Computers in Human Behavior*, 63(10), 604–612. https://doi.org/10.1016/j.chb.2016.05.084

Kessler, G. (2013). Teaching ESL/EFL in a world of social media, Mash-Ups, and Hyper-Collaboration. *TESOL Journal*, 4(4), 615–632. https://doi.org/10.1002/tesj.106

Li, L. (2019). Challenges and opportunities: Enhancing student engagement through technology in the classroom. Journal of Educational Research and Practice, 9(1), 27-39. doi:10.5590/JERAP.2019.09.1.03

Li, G., Sun, Z., & Jee, Y. (2019). The more technology the better? A comparison of teacher-student interaction in high and low technology use elementary EFL classrooms in China. *System*, 84, 24–40. https://doi.org/10.1016/j.system.2019.05.003

Metaria & Cahyono, B. Y. (2024). EFL students' engagement in the post-pandemic teaching: Does technology matter*? JEFL/Journal on English as a Foreign Language*, 14(1), 26–47. https://doi.org/10.23971/jefl.v14i1.6503

McClean, S., & Crowe, W. (2017). Making room for interactivity: using the cloud-based audience response system Nearpod to enhance engagement in lectures. *FEMS Microbiology Letters*, 364(6). https://doi.org/10.1093/femsle/fnx052

McKnight, P.E., & Najab, J. (2022). Mann–Whitney U Test. *The SAGE Encyclopedia of Research Design.* https://doi.org/10.1002/9780470479216.CORPSY0524

Musa, M. a. A., & Momani, J. a. A. (2022). University Students' Attitudes towards using the Nearpod Application in Distance Learning. *Journal of Education and E-learning Research*, 9(2), 110–118. https://doi.org/10.20448/jeelr.v9i2.4030

PrayudhaS, J. (2023). Developing students' interest in learning English through digital learning platform. *Ebony*, 3(2), 83–90. https://doi.org/10.37304/ebony.v3i2.9701

Sanmugam, M., Selvarajoo, A., Ramayah, B., & Lee, K. W. (2019). USE OF NEARPOD AS INTERACTIVE LEARNING METHOD. *INTED Proceedings*. https://doi.org/10.21125/inted.2019.2219

Sarhandi, P. S. A., Bajnaid, A., & Elyas, T. (2017). Impact of smartphone based activities on EFL students' engagement. *English Language Teaching*, 10(6), 103. https://doi.org/10.5539/elt.v10n6p103

Sari, A. B. P. (2021). THE IMPACTS OF MENTIMETER-BASED ACTIVITIES ON EFL STUDENTS' ENGAGEMENT IN INDONESIA. *LLT Journal/LLT Journal*, 24(1), 249–260. https://doi.org/10.24071/llt.v24i1.3025

Tarazi, A., & Ortega-Martín, J. L. (2023). Enhancing EFL students' engagement in online synchronous classes: The role of the Mentimeter platform. *Frontiers in Psychology*, 14. https://doi.org/10.3389/fpsyg.2023.1127520

Teng, Y., & Wang, X. (2021). The effect of two educational technology tools on student engagement in Chinese EFL courses. *International Journal of Educational Technology in Higher Education*, 18(1). https://doi.org/10.1186/s41239-021-00263-0

Wang, M., Fredricks, J. A., Ye, F., Hofkens, T., & Linn, J. S. (2016). The Math and Science engagement scales: Scale development, validation, and psychometric properties. *Learning and Instruction*, *43*, 16–26. https://doi.org/10.1016/j.learninstruc.2016.01.008

Wang, H., Wang, M., & Li, G. (2022). The use of social media inside and outside the classroom to enhance students' engagement in EFL contexts. *Frontiers in Psychology*, 13. https://doi.org/10.3389/fpsyg.2022.1005313

Wang, J., & Chia, I. (2020). Engaging students via NearPod® in synchronous online teaching. *Management Teaching Review*, 7(3), 245–253. https://doi.org/10.1177/2379298120974959

Xu, B., Chen, N. S., & Chen, G. (2020). Effects of teacher role on student engagement in WeChat-based online discussion learning. *Computers & Education*, 157, 103956. https://doi.org/10.1016/j.compedu.2020.103956