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DEVELOPMENT OF A TEACHING PRESENCE-BASED ASYNCHRONOUS DISCUSSION FORUM TO ENHANCE STUDENT ENGAGEMENT IN THE INTRODUCTION TO EDUCATIONAL TECHNOLOGY COURSE

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Abstract

Asynchronous learning in online environments requires instructional designs that can establish instructor presence and promote sustained student engagement. This study aimed to develop and examine the effectiveness of a teaching presence-based asynchronous discussion forum in enhancing student engagement in the Introduction to Educational Technology course. The study employed a research and development approach using the ADDIE model. Product validation involved three experts, product trials were conducted with 27 students, and the implementation phase involved 31 students from the Educational Technology Study Program at Universitas Pendidikan Ganesha. Product validity and practicality were analyzed descriptively, while the effectiveness of the forum on student engagement was analyzed inferentially using a paired sample t-test. The results indicate that the developed discussion forum achieved a very good level of validity and was practical to use. The effectiveness test showed a significant increase in student engagement following the implementation of the teaching presence-based asynchronous discussion forum. Therefore, the developed forum is effective in enhancing behavioral, affective, and cognitive engagement and is recommended as an asynchronous learning strategy in higher education.

INTRODUCTION

The transformation of technology in education has brought fundamental changes to the way learning is designed and implemented. The use of technology not only transforms instructional tools and media but also shapes patterns of learner engagement in the learning process. Technology integration enables learning to take place flexibly without the constraints of time and space, allowing learners to remain engaged in learning activities even when they do not meet instructors at the same

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place and time (Octavia et al., 2025). In this context, digitally designed interactive learning has been shown to increase learning motivation, which subsequently impacts the intensity of learners' engagement in learning activities (Suganda et al., 2025).

In line with the definition of educational technology proposed by the Association for Educational Communications and Technology (AECT, 2023), educational technology is defined as the study and ethical practice of facilitating learning and improving performance through the creation, use, and management of appropriate technological processes and resources. This definition emphasizes a shift in the role of instructors from mere transmitters of content to facilitators who design learning experiences and foster meaningful interactions.

Further technological developments have accelerated the implementation of online learning, which refers to learning systems based on digital devices and internet networks (Zain et al., 2023). Online learning offers flexibility in terms of time, location, and access to diverse learning resources. However, the effectiveness of online learning does not solely depend on the availability of instructional materials, but also on the quality of interactions that can sustain learner engagement over time (Purwandari et al., 2022).

Student engagement has become a key factor in the success of online learning, as it reflects the extent to which learners are actively involved in the learning process. Engagement is multidimensional, encompassing behavioral, emotional, and cognitive engagement (Yorganci, 2025). In online learning environments, engagement is not only reflected through formal attendance, but also through reflection, participation, and meaningful interactions with instructors and peers (Suartama et al., 2024). Several studies indicate that high levels of engagement contribute to student satisfaction and sustained participation, whereas low engagement is associated with an increased risk of dropout (Agustina & Saragih,

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2022; Szabó et al., 2024). Unfortunately, not all educational institutions are able to foster optimal learner engagement in online learning contexts.

Observations conducted during the odd semester of 2025 in the Educational Technology Study Program at Universitas Pendidikan Ganesha revealed that asynchronous learning through the Learning Management System (LMS) was still dominated by content distribution and assignment submission activities, while the use of discussion forums had not been optimally implemented. Interactions tended to be one-way, student engagement was uneven, and instructor feedback was limited. In addition, the results of a questionnaire distributed to students who had taken the Introduction to Educational Technology course showed that 70% of respondents rated the effectiveness of asynchronous online learning as moderate, indicating the need to strengthen instructional design to enhance student engagement.

These findings were further reinforced through interviews conducted during the same period with the lecturer responsible for the Introduction to Educational Technology course. The interviews indicated that, in practice, asynchronous learning still faced challenges such as limited instructor presence, insufficient feedback, and poorly structured discussion designs. This condition was also influenced by the absence of a systematic framework for developing asynchronous learning activities, particularly discussion forums. Based on these conditions, there is a need to develop a learning platform grounded in a conceptual approach that can strengthen instructor presence and create more structured and meaningful asynchronous learning activities.

Hew and Cheung (2014) stated that low participation in online discussions is influenced by unclear discussion structures and limited meaningful interaction. In addition, delayed or non-specific feedback can reduce learning motivation, even though timely and constructive feedback plays a crucial role in maintaining the direction and quality of learning (Henderson et al., 2021; Jurs & Špehte, 2021).

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Instructor presence through planned facilitation of discussions and feedback provision has been proven to increase participation and the quality of learner engagement (Relmasira et al., 2025).

One strategy with the potential to address these issues is the use of asynchronous discussion forums. Participation in online discussion forums provides students with opportunities to reflect on learning materials, exchange ideas, and respond to peers' perspectives more deeply than in synchronous discussions (Du et al., 2022; Sabbag et al., 2025). Given that the effectiveness of discussion forums depends heavily on instructional design and facilitation, they need to be integrated through an approach that emphasizes instructor presence. Teaching presence, as a core component of the Community of Inquiry (CoI) framework, emphasizes the role of instructors in designing, facilitating, and directing students' cognitive and social processes to achieve meaningful learning outcomes (Anderson et al., 2001). Based on this background, this study aims to develop a teaching presence-based asynchronous discussion forum integrated into the LMS of the Introduction to Educational Technology course to promote student engagement.

METHODS

This study employed a research and development (R&D) approach using the ADDIE model, which consists of five stages: analyze, design, develop, implement, and evaluate (Branch, 2009). The overall flow of the ADDIE model is illustrated in Figure 1.

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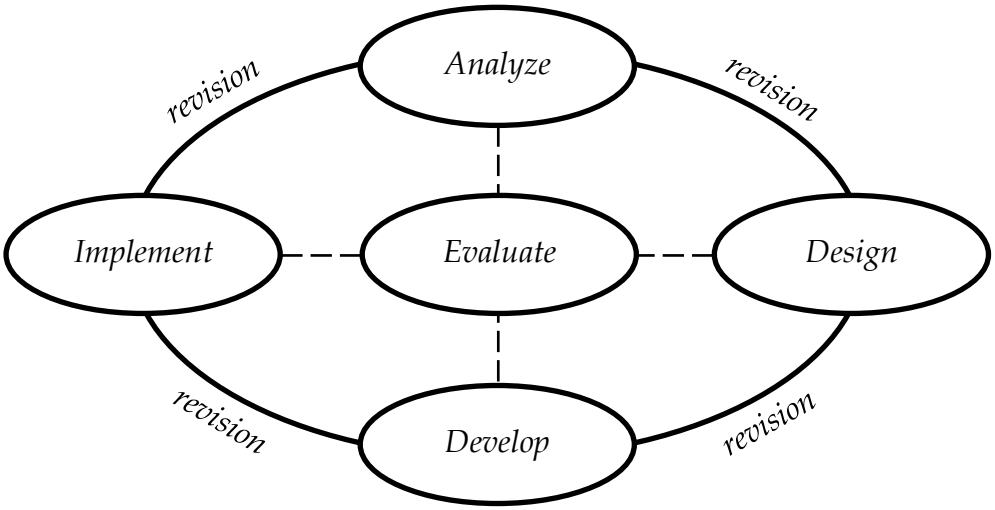

Figure 1. ADDIE Development Model (Branch, 2009)

At the Analyze stage, the study identified problems in asynchronous learning and levels of student engagement through observations, interviews, and questionnaires. The results of this analysis were used as the basis for determining the need to develop an asynchronous discussion forum. The Design stage focused on designing a teaching presence-based asynchronous discussion forum, which included formulating discussion objectives, structuring discussion flows, developing triggering questions, determining student participation guidelines, and designing mechanisms for instructor feedback. The Develop stage involved implementing the discussion forum design within the Learning Management System (LMS) for the Introduction to Educational Technology course. At this stage, product validation was also conducted through expert judgment to ensure the feasibility of the developed discussion forum before it was implemented with students. The Implement stage was carried out by applying the validated asynchronous discussion forum to 31 students enrolled in the Introduction to Educational Technology course in order to obtain data on student engagement. Finally, the Evaluate stage was conducted both formatively and summatively to assess the effectiveness of the developed discussion forum based on implementation results and analysis of student engagement data.

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Data analysis in this study was conducted using both descriptive and inferential approaches. Descriptive statistical analysis was used to assess product validity based on expert evaluation results, which were analyzed using percentage-based feasibility levels. Inferential statistical analysis was employed to examine the effectiveness of the developed discussion forum in enhancing student engagement. A paired sample *t*-test was conducted on student engagement data collected before and after the implementation of the teaching presence-based discussion forum to determine whether there was a statistically significant increase in student engagement.

RESULTS AND DISCUSSION

Results

A. Teaching Presence-Based Asynchronous Discussion Forum

The results of the initial analysis indicated that asynchronous learning in the Introduction to Educational Technology course had not yet been able to optimally promote student engagement. Discussion forums within the Learning Management System (LMS) were still used in a limited manner, with interactions tending to be one-way, uneven student participation, and minimal instructor feedback. This condition indicates the need for the development of a discussion forum that is systematically designed and capable of pedagogically representing the instructor's role in asynchronous learning.

Based on the results of this analysis, a teaching presence-based asynchronous discussion forum integrated into the LMS for the Introduction to Educational Technology course was developed. This discussion forum was designed to strengthen instructor presence through the components of instructional design and organization in structuring discussion objectives and flows, facilitation of discourse in supporting interaction and idea exchange among students, and direct instruction through cognitive guidance and continuous feedback. The integration of these three components aimed to ensure that asynchronous learning activities were not merely

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administrative, but were able to meaningfully enhance student engagement. Examples of the developed teaching presence-based asynchronous discussion activities are presented in Figures 2 and 3, illustrating the discussion structure, opening statements, triggering questions, participation rules, and examples of instructor feedback provided to students.

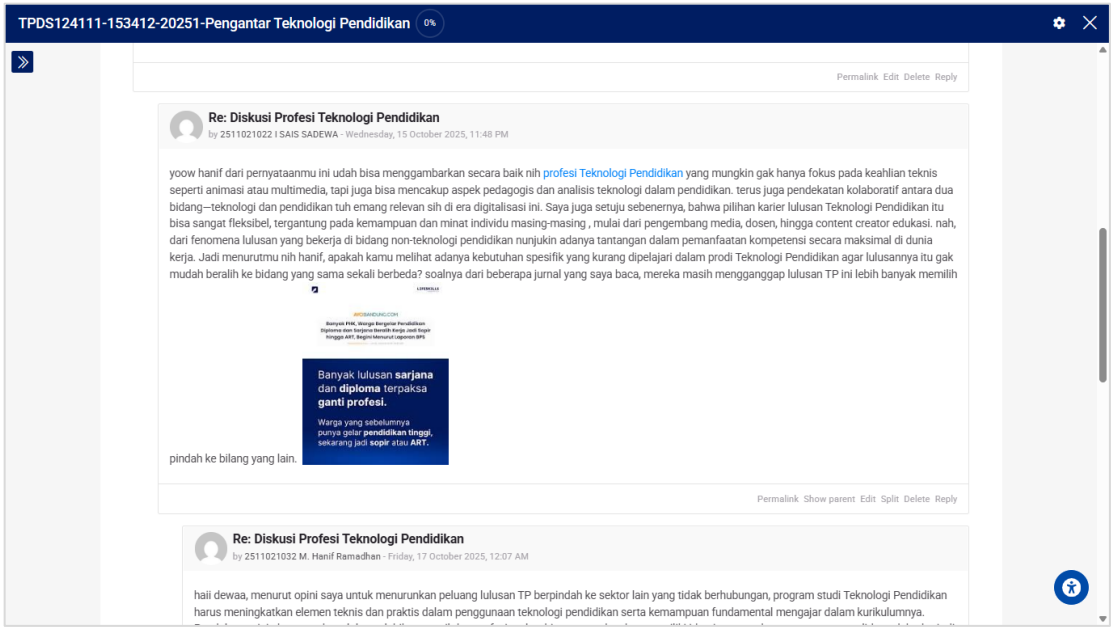

Figure 2. Student Discussion Activity Interface

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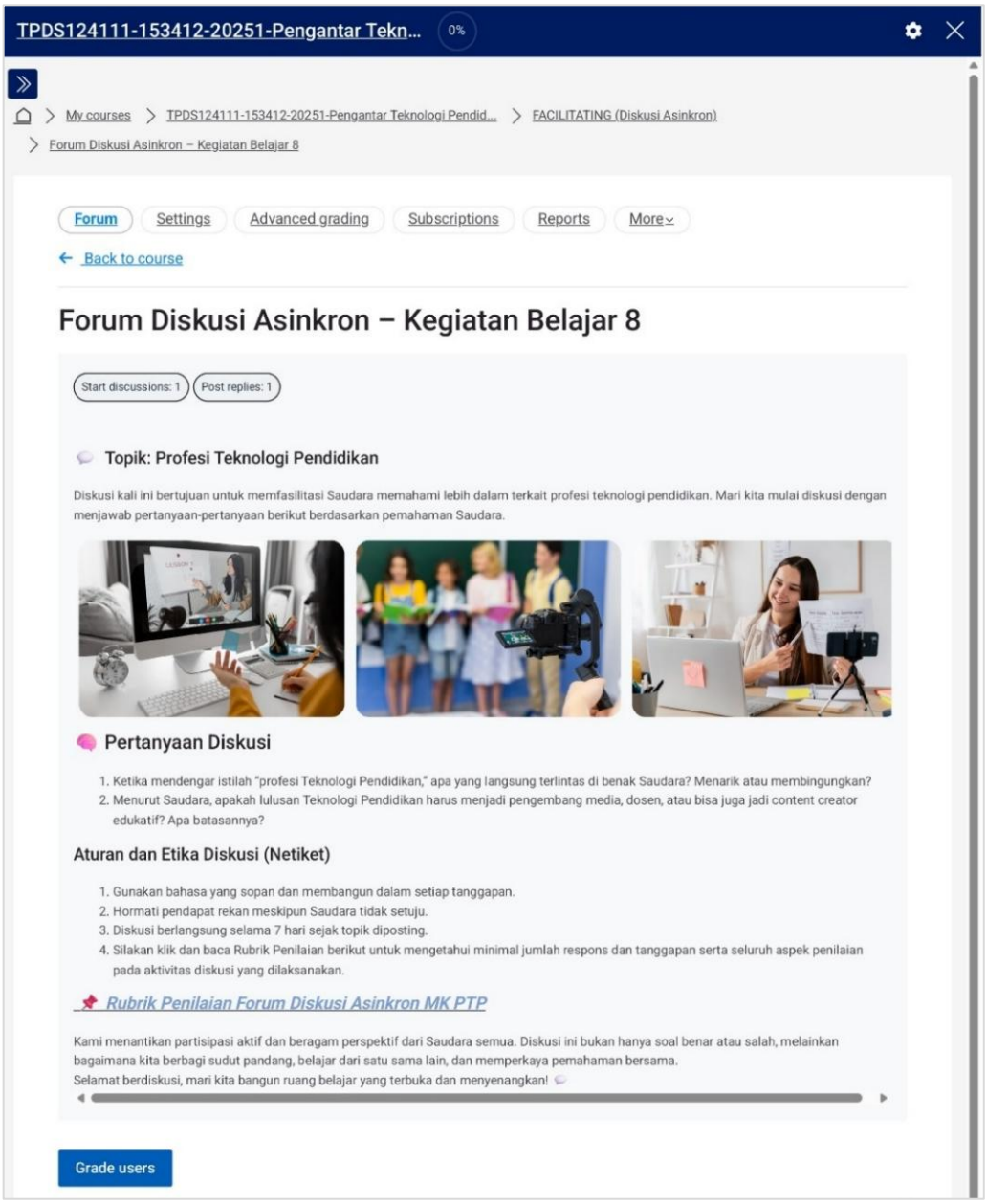

Figure 3. Instruction Interface of the Teaching Presence-Based Asynchronous Discussion Forum

The teaching presence-based asynchronous discussion forum consists of discussion openings, supporting media, triggering questions, discussion guidelines, cognitive guidance, and constructive feedback aligned with course content. The forum is integrated into the LMS and supports text, image, and video uploads to enrich discussions. In addition, the forum is equipped with an automatic notification

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and reminder system to encourage active student participation. The discussion forum also includes engagement analysis features that enable instructors to monitor student participation levels based on the number of responses contributed.

Student activity evaluation within the discussion forum was conducted using an automated rubric-based assessment system with clearly defined criteria to measure student engagement. This evaluation was developed based on three domains of student engagement: behavioral, affective, and cognitive engagement. The integration of the engagement assessment rubric into the teaching presence-based asynchronous discussion forum is presented in Figures 4 and 5.

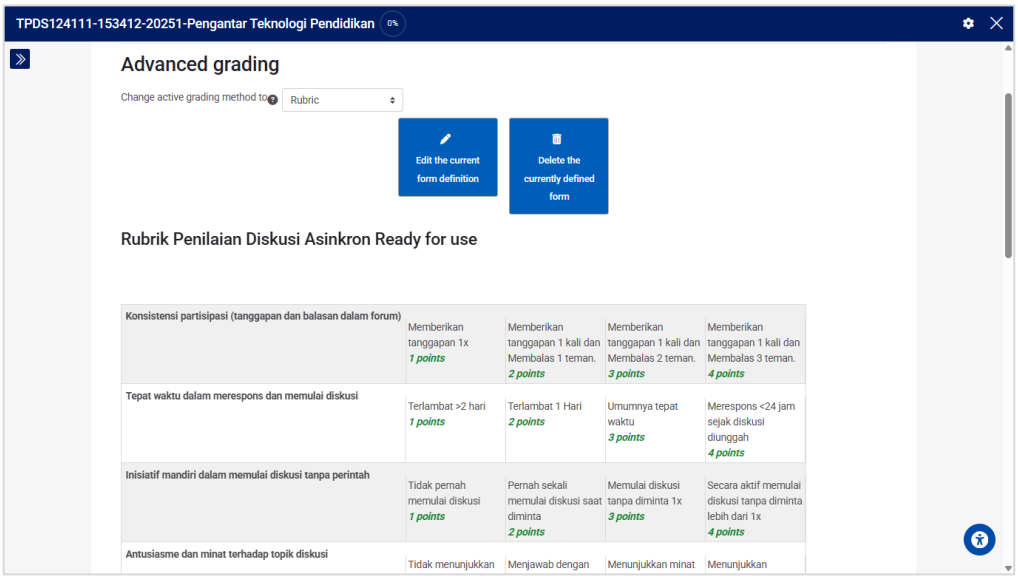

Figure 4. Rubric Integration Interface in the Discussion Forum System

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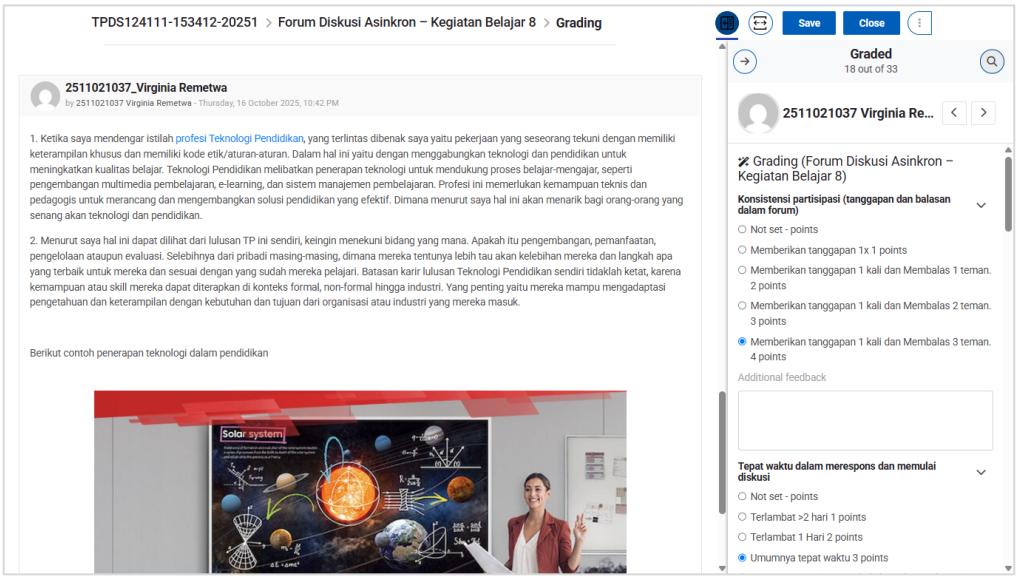

Figure 5. Instructor Assessment Interface for Student Discussions

This rubric integration allows instructors to assess student engagement and provide feedback directly within the LMS discussion forum activities. As a result, asynchronous learning processes do not stagnate, and instructors are able to continuously monitor the development of student engagement.

B. *Validity and Practicality of the Teaching Presence-Based Asynchronous Discussion Forum in the Introduction to Educational Technology Course*

The validity and practicality of the teaching presence-based asynchronous discussion forum were evaluated through expert review and product trials to ensure the feasibility of the forum prior to broader implementation. Expert validation involved an instructional design expert and subject matter experts, while product practicality was examined through individual trials, small group trials, and field trials.

The results of the instructional design expert validation indicated that the asynchronous discussion forum achieved a feasibility percentage of 94%, which falls into the Very Good category. This evaluation confirms that the instructional design applied in the discussion forum meets principles of clarity of objectives, consistency

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among learning indicators, content, and assessment, systematic presentation, as well as the provision of motivation and feedback. Based on these results, the discussion forum was deemed suitable for use without requiring revisions in terms of instructional design.

Validation by subject matter experts involved two experts and resulted in an average feasibility percentage of 95%, which is classified as Very Good. These findings validate that the discussion materials are aligned with learning outcomes, conceptually accurate, current, relevant to student characteristics, and supported by appropriate examples and questions. Therefore, the discussion forum was considered highly feasible from the content perspective.

Product practicality was subsequently examined through individual trials involving three students representing low, medium, and high academic achievement levels. The results of the individual trials showed an average percentage of 93.18%, categorized as Very Good, indicating that the discussion forum is easy to use, visually clear, and supportive of student learning and discussion activities.

Small group trials involving nine students yielded an average percentage of 93.64%, also categorized as Very Good. These findings further strengthen the conclusion that the teaching presence-based asynchronous discussion forum demonstrates a high level of practicality and can be effectively used by students with diverse characteristics.

Field trials were conducted with 23 students to examine the practicality of the discussion forum in an authentic learning context. The results of the field trials showed an average percentage of 85.69%, classified as Good. Although variations in student participation were observed, overall the discussion forum was considered practical and applicable in asynchronous learning activities.

Based on expert validation and product trials with students, the teaching presence-based asynchronous discussion forum was concluded to be valid and practical, and

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therefore feasible for implementation in the Introduction to Educational Technology course.

C. *Effectiveness of the Teaching Presence-Based Asynchronous Discussion Forum on Student Engagement*

The effectiveness of the teaching presence-based asynchronous discussion forum was analyzed to determine its impact on student engagement in the Introduction to Educational Technology course. Effectiveness testing employed a one-group pretest-posttest design involving 31 students. Data analysis was conducted using inferential statistics through a paired sample *t*-test, preceded by assumption testing for normality and homogeneity of variance.

The results of the Kolmogorov-Smirnov normality test indicated a significance value of 0.200 > 0.05, indicating that the pretest and posttest data were normally distributed. Furthermore, the homogeneity of variance assumption test using Levene's Test showed a significance value of 0.502 > 0.05. As both prerequisite tests were satisfied, the data met the assumptions for parametric analysis and were appropriate for further analysis using a paired sample *t*-test.

Descriptively, the analysis results showed an increase in student engagement following the implementation of the teaching presence-based asynchronous discussion forum. The mean student engagement score prior to the intervention (pretest) was 42.74, while after the intervention (posttest) it increased to 84.68. This increase indicates a substantial improvement in student engagement from a descriptive perspective.

The paired sample *t*-test results revealed a significance value (Sig. 2-tailed) of 0.001 < 0.05. Therefore, the null hypothesis (H_0) was rejected and the alternative hypothesis (H_1) was accepted. These results indicate a statistically significant difference in student engagement before and after the implementation of the teaching presence-based asynchronous discussion forum. Accordingly, the teaching presence-based

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asynchronous discussion forum was proven to be effective in enhancing student engagement in the Introduction to Educational Technology course.

Discussion

The development of the teaching presence-based asynchronous discussion forum was motivated by the need for more structured academic interaction in online learning for the Introduction to Educational Technology course. Initial findings indicated that previously used discussion forums were unable to consistently provide instructional guidance and facilitation, resulting in students' limited understanding of participation expectations. This condition is consistent with the findings of Fouché et al. (2022), which emphasize that asynchronous discussion forums do not automatically promote student engagement without clear pedagogical design, and is further supported by Yorganci (2025) and Wilson (2023), who highlight the critical role of instructional design and instructor presence in determining the effectiveness of online discussions. Therefore, teaching presence was positioned as the conceptual foundation for strengthening the instructor's role in asynchronous learning (Anderson et al., 2001; Garrison & Arbaugh, 2007).

The development results demonstrate that integrating the components of instructional design and organization, facilitation of discourse, and direct instruction within the discussion forum produced more clearly structured and goal-oriented learning activities. The forum was designed with discussion openings, triggering questions, participation guidelines, and planned instructor feedback, providing students with clear expectations regarding the objectives and quality of their contributions. This instructional clarity supports the findings of Steenkamp & Brink (2024), which indicate that explicitly designed discussion forums contribute to deeper levels of discussion, as well as those of Al-Fraihat et al. (2025), who emphasize the importance of system transparency and ease of navigation in LMS environments to support online collaborative learning. The integration of assessment rubrics and the

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use of visual upload features further enriched student participation, aligning with previous studies by Forbes (2022) and Zezarwati et al. (2022).

From the perspectives of validity and practicality, the results of instructional design and content expert evaluations were classified as Very Good, while student trials indicated that the discussion forum was easy to use and suitable for students with diverse characteristics. These findings suggest that the developed product is not only pedagogically valid but also efficient and applicable in real instructional contexts. This result is consistent with Ramadhani et al. (2023), who emphasized the importance of expert validation and user feedback in ensuring the readiness of digital learning media for implementation.

The effectiveness of the teaching presence-based asynchronous discussion forum was reflected in the significant increase in student engagement following its implementation. Instructor presence through structured discussion design, active facilitation of interactions, and continuous feedback provision directly contributed to improvements in behavioral, affective, and cognitive engagement. These findings are in line with those of Morrison & Jacobsen (2023) and Li et al. (2025), who emphasized that instructors' instructional presence plays a crucial role in enhancing self-regulation and clarity in the learning process. Therefore, the teaching presence-based asynchronous discussion forum can be considered an effective strategy for increasing student engagement in asynchronous learning environments.

CONCLUSION

This study resulted in the development of a teaching presence-based asynchronous discussion forum integrated into the Learning Management System for the Introduction to Educational Technology course. The development of the discussion forum was grounded in the need for more structured asynchronous learning that is capable of representing instructor presence in instructional, facilitative, and directive roles. The results demonstrate that a discussion forum

designed according to the principles of instructional design and organization, facilitation of discourse, and direct instruction is able to provide a clear discussion flow, support meaningful interaction, and strengthen student engagement in online learning.

Expert validation by instructional design and content specialists indicated that the discussion forum met feasibility criteria with a Very Good qualification, while the results of staged product trials demonstrated that the forum was practical and easy to use by students with diverse characteristics. These findings confirm that the teaching presence-based asynchronous discussion forum is not only pedagogically valid but also ready for implementation in asynchronous learning contexts in higher education.

The implementation of the teaching presence-based asynchronous discussion forum was proven to significantly enhance student engagement. Instructor presence through clear discussion design, active facilitation of interaction, and continuous feedback provision contributed to improvements in behavioral, affective, and cognitive engagement. Therefore, the teaching presence-based asynchronous discussion forum is recommended as an effective asynchronous learning strategy to support the quality of interaction and student engagement in online learning in higher education.

DAFTAR PUSTAKA

Agustina, K. D., & Saragih, A. H. (2022). Learning Engagement Effect on Satisfaction, and Future Preferences of Online Tax Brevet. *Dinamika Pendidikan*, *17*(1), 86–106. https://doi.org/10.15294/dp.v17i1.33479

Al-Fraihat, D., Alshahrani, A. M., Alzaidi, M., Shaikh, A. A., Al-Obeidallah, M., & Al-Okaily, M. (2025). Exploring students' perceptions of the design and use of the Moodle learning management system. *Computers in Human Behavior Reports*, *18*. https://doi.org/10.1016/j.chbr.2025.100685

Anderson, T., Rourke, L., Garrison, D. R., & Archer, W. (2001). Assessing teaching presence in a computer conferencing context. *Journal of Asynchronous Learning Network*, *5*(2). https://doi.org/10.24059/olj.v5i2.1875

Association for Educational Communications and Technology. (2023). *AECT Definition for Educational Technology*. Https://Www.Aect.Org/Aect/about/Aect-Definition. https://www.aect.org/aect/about/aect-definition

Branch, R. M. (2009). Instructional Design: The ADDIE approach. In *Instructional Design: The ADDIE Approach*. Springer US. https://doi.org/10.1007/978-0-387-09506-6

Du, Z., Wang, F., Wang, S., & Xiao, X. (2022). Enhancing Learner Participation in Online Discussion Forums in Massive Open Online Courses: The Role of Mandatory Participation. *Frontiers in Psychology*, *13*. https://doi.org/10.3389/fpsyg.2022.819640

Forbes, D. (2022). Student Expectations of Peers in Academic Asynchronous Online Discussion. In *Journal of Open* (Vol. 26, Issue 1).

Fouché, I., Kimani, W., & Nkosi, H. (2022). Using online discussion forums to promote student engagement in an academic literacies course. *Journal for Language Teaching*, *56*(2). https://doi.org/10.56285/jltvol56iss2a5384

Garrison, D. R., & Arbaugh, J. B. (2007). Researching the community of inquiry framework: Review, issues, and future directions. *Internet and Higher Education*, *10*(3), 157–172. https://doi.org/10.1016/j.iheduc.2007.04.001

Henderson, M., Ryan, T., Boud, D., Dawson, P., Phillips, M., Molloy, E., & Mahoney, P. (2021). The usefulness of feedback. *Active Learning in Higher Education*, *22*(3), 229–243. https://doi.org/10.1177/1469787419872393

Hew, K. F., & Cheung, W. S. (2014). Student participation in online discussions: Challenges, solutions, and future research. In *Student Participation in Online Discussions: Challenges, Solutions, and Future Research*. Springer. https://doi.org/10.1007/978-1-4614-2370-6

Jurs, P., & Špehte, E. (2021). The Role of Feedback in the Distance Learning Process. *Journal of Teacher Education for Sustainability*, *23*(2), 91–105. https://doi.org/10.2478/jtes-2021-0019

Li, K., Lan, J., & Hu, Y. (2025). Comparative analysis of GPT-4.0 and teacher feedback on student-generated questions in the flipped classroom. *Educational Technology Research and Development*, 1347–1369. https://doi.org/10.1007/s11423-025-10467-0

Morrison, L., & Jacobsen, M. (2023). The role of feedback in building teaching presence and student self-regulation in online learning. *Social Sciences and Humanities Open*, *7*(1). https://doi.org/10.1016/j.ssaho.2023.100503

Octavia, V. B., Khumaidah, S., Najwa, M. S., & Zulfahmi, M. N. (2025). Transformasi Pendidikan Abad 21 Melalui Teknologi Pendidikan. *Jurnal Pendidikan Dan Pengajaran*, *3*(1), 33–39.

Purwandari, E. P., Junus, K., & Santoso, H. B. (2022). Exploring e-learning community of inquiry framework for engineering education. *International Journal of Instruction*, *15*(1), 619–632. https://doi.org/10.29333/iji.2022.15135a

Ramadhani, R., Syahputra, E., Simamora, E., & Soeharto, S. (2023). Expert judgement of collaborative cloud classroom quality and its criteria using the many-facets rasch model. *Heliyon*, *9*(10). https://doi.org/10.1016/j.heliyon.2023.e20596

Relmasira, M. V., Lekawael, R., & Pesiwarissa, R. (2025). The Implementation of Quizizz Media to Improve Students' English Learning Achievement at SMP Negeri 9 Ambon. *Jurnal Inovasi Dan Teknologi Pendidikan JURINOTEP*, *4*(2), 528–537. https://doi.org/10.46306/jurinotep.v4i2

Sabbag, A., Justice, N., Frame, S., Laundroche, L., & Roggenkemper, R. (2025). The Development of Collaborative Keys to Promote Engagement in Undergraduate Online Asynchronous Statistics Courses. *Journal of Statistics and Data Science Education*, 1–19. https://doi.org/10.1080/26939169.2024.2448465

Steenkamp, G., & Brink, S. M. (2024). Students' experiences of peer learning in an accounting research module: Discussion forums, peer review and group work. *International Journal of Management Education*, *22*(3). https://doi.org/10.1016/j.ijme.2024.101057

Suartama, I. K., Sudarma, I. K., Sudatha, I. G. W., Sukmana, A. I. W. I. Y., & Susiani, K. (2024). Student engagement and academic achievement: the effect of gamification on case and project-based online learning. *Journal of Education and Learning*, *18*(3), 976–990. https://doi.org/10.11591/edulearn.v18i3.21349

Suganda, A., Atfaliyah, K., Yulianti, H., & Hanifatunnufus, F. (2025). Penggunaan Media Pembelajaran Wordwall untuk Meningkatkan Motivasi Peserta Didik Pada Pembelajaran IPAS Tingkat SD. *Jurnal Inovasi Dan Teknologi Pendidikan JURINOTEP*, *4*(1), 18–26. https://doi.org/10.46306/jurinotep.v4i1.96

Szabó, L., Zsolnai, A., & Fehérvári, A. (2024). The relationship between student engagement and dropout risk in early adolescence. *International Journal of Educational Research Open*, *6*. https://doi.org/10.1016/j.ijedro.2024.100328

Wilson, S. (2023). Asynchronous Lecturer-Supported Discussion Forum In Teaching Quantitative Methods To Business Students. *Journal of Management and Business Education*, *6*(2), 122–141. https://doi.org/10.35564/jmbe.2023.0007

Yorganci, S. (2025). The impact of synchronous online discussions and online flipped learning on student engagement and self-regulation among preliminary undergraduates in a basic math course. *Educational Technology Research and Development*. https://doi.org/10.1007/s11423-025-10459-0

Zain, I. M., Kania Rahman, I., Mansur Tamam, A., & Al Binaa, S. (2023). Metode Kreatif Pembelajaran Daring. *Al Marhalah*, *7*(1).

Zezarwati, I., Kaharuddin, A., Abubakar, M., Syahruddin Nawir, M., Islam, U., & Alauddin Makassar, N. (2022). Investigating EFL students' interest in the use of online discussion technique in asynchronous learning. In *Journal of Applied Studies in Language* (Vol. 6, Issue 1). http://ojs2.pnb.ac.id/index.php/JASL