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EVOLVING MINDS: AN EXPLORATION OF DIGITAL PEDAGOGY IN CULTIVATING CRITICAL THINKING SKILLS AMONG 21ST CENTURY LEARNERS

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ABSTRACT
In the ever-evolving landscape of education, English teachers must harness the potential of digital pedagogy to cultivate critical thinking skills among 21st-century learners. This qualitative phenomenological study aimed to explore the integration of digital pedagogy in fostering critical thinking skills among senior high school students. This qualitative phenomenological approach collected data from interviews and observations of 10 senior high school teachers. The data was collected using coding and analyzed through thematic analysis techniques. The results revealed a significant gap in integrating technology into education, highlighting the need for enhanced digital pedagogy practices. This study underscores the transformative potential of digital tools and platforms in creating dynamic learning environments conducive to inquiry, analysis, and problem-solving. Based on the findings, recommendations include facilitating professional development opportunities focused on digital pedagogy and technology integration. Principals can be pivotal in promoting ongoing training and workshops led by skilled practitioners or technology experts, ensuring teachers remain abreast of the latest digital tools and teaching methodologies. By empowering teachers with the knowledge, skills, and resources to utilize digital pedagogy effectively, educators can better equip students with the critical thinking skills necessary for success in the 21st century.
KEYWORDS: *Digital pedagogy, English teachers, critical thinking skills, 21 century learners*

INTRODUCTION
Digital pedagogy in design education confronts the dual challenge of outdated curricula and teachers' resistance to integrating new technologies, exacerbated by the difficulty of managing large classes. Moreover, the problem of the development of critical reading skills remains a pressing issue, with disparities among students in this generation. In the same way, leveraging digital tools and interactive content enhances student engagement and addresses these challenges, particularly in English as a Second Language classrooms in the Philippines, where creative teaching methods are essential for nurturing critical thinking amidst cultural and language barriers.

In Thailand, Boonmoh (2021) noted that secondary-level Thai teachers employed networked technology, although they concentrated on only 18 recognized technological instruments. Among the resources used in their English as a Foreign Language (EFL) classrooms were Quizizz, Plickers, Edmodo, Quiver, and Kahoot. Although numerous empirical research studies have emphasized the advantages of using technological tools in English Language Teaching (ELT), there are still practical obstacles to integrating technology in secondary school ELT classrooms. Boonmoh emphasizes that many secondary educators wanted to include technology in their lessons, provided they met certain requirements such as having an adequate English language education, being comfortable with technology, and having real-world experience utilizing it.

In Utah, students can read more engagingly in the United States of America when multimedia and interactive aspects are incorporated into literary texts. These studies demonstrate how multimedia integration can promote a closer relationship with literary materials. Through online platforms, digital pedagogy facilitates group reading experiences

that promote conversation and joint analysis of literary texts. These studies highlight how digital tools help students feel like they belong and encourage them to participate in literary debates (Garcia & Piotrowski, 2022).

A study conducted in Canada by Hagerman et al. (2020) states that improving students' contextual awareness is crucial because reading comprehension requires meaningful interpretation and good communication with the text. When readers connect with the content, they are forced to remember specific information; thus, they must have a solid understanding of the subject. The capacity to create significant mental images depends on knowing a certain topic or domain. Background knowledge is crucial for reading comprehension since it enables students to choose relevant information, sort through word definitions, and make well-informed conclusions from the text. Students need to build a solid baseline knowledge base before reading to understand the text's subtleties fully.

On the other hand, the low literacy rates in the Philippines, particularly in the National Capital Region, indicate that reading comprehension is a universal difficulty for pupils worldwide, including Filipino children. The 2018 Program for International Student Assessment (PISA), which assessed students' literacy levels in 79 participating nations, highlights this difficulty. The Philippines' average reading score was 340, which was far lower than the OECD average of 487 and showed that Filipino students had a serious reading comprehension deficit. This disturbing finding places the Philippines near the bottom of the reading comprehension competency scale, indicating a common challenge that Filipino pupils encounter with this important ability (Galang, 2020).

Meanwhile, Gabriel (2021) in Manila identified a national issue regarding insufficient student gadgets when schools implemented ICT. Furthermore, the transition to online learning posed challenges for students and teachers, leading to difficulties stemming from mental and physical burdens. This disadvantage in adopting ICT could result in some students being compelled to discontinue their education. However, educational institutions have incorporated mobile or cellular phones as examples of ICT tools for learning purposes.

Consequently, Zamboanga City by Atilano-Tang and Cirilo (2023) highlighted challenges hindering effective technology integration in teaching, including limited access to technology, poor internet connectivity, and insufficient training and support. Opportunities for improvement were identified, such as enhancing technology access, providing professional development, and fostering a supportive organizational culture. The study emphasizes the importance of addressing socio-technical and organizational factors, advocating for a comprehensive approach to improve technology integration in education.

Similarly, in Davao City, an investigation into the Adoption of ICT in schools has a connection to the Attitude of Senior High School Students. The study's results highlight that ICT is highly adopted by senior high school students, and Senior high school students display a moderate attitude towards adopting ICT. The study also shows a significant relationship between ICT adoption and the attitude of senior high school students towards adopting ICT (Hernandez et al., 2023).

This manner of disseminating academic materials is shown in the study conducted by Lim and Arcilla (2021) in Davao City; their findings stated that due to the utilization of technological tools, students grew lazy, became reliant on Google, and received information from the Internet without identifying its validity. Furthermore, the study revealed that this dependency on easily accessible information led to a decline in critical thinking and research skills among students. As a result, there is a growing concern about the long-term impact of technology on the quality of education and intellectual development.

In the Philippine English education system, where English is officially taught as a second language, the challenges intensify when learning Literature in English. The English as a Secondary Language classroom grapples with numerous language and cultural obstacles, demanding innovative and creative approaches from educators to engage students' interest in literary learning and reading. The resurgence of English Literature in Philippine classrooms underscores the urgency for teachers to employ novel teaching methods. As today's classrooms witness increasing diversity and uniqueness, integrating Information and Communication Technology (ICT) has opened new avenues for collaborative learning. In the literature classroom, students often need help reading and comprehending assigned literary texts due to language proficiency gaps and the need for more suitable teaching materials. To address these

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issues and motivate Kindle students to explore Literature, teachers need to incorporate visual aids in literature education.

The following questions guided this qualitative case study:

1. What challenges do English teachers face in utilizing digital pedagogies and cultivating students' interest in reading literary texts?
2. How can digital pedagogy serve as a coping mechanism in motivating students' interest in reading literary texts?
3. What are the teaching insights gained by English teachers in utilizing digital pedagogies as an effective learning tool in motivating students to read literary texts?

METHODOLOGY

Research Design

In the next section, the specific details of the research procedures will be described so future researchers can generalize the results from this study to other situations. Extensive and careful descriptions of the study's time, place, context, and culture will be thoroughly discussed to develop transferability, which is the qualitative parallel to external validity in post-positivist research (Mertens, 2005). This section will (a) discuss the interview approach, (b) explain the role of the researcher, and lastly, (c) describe the sampling method and ethical considerations.

Research Participants

The target population for this study will be ten (10) participants from the line-up of private schools in senior high school faculty, a senior high school unit who are still teaching during the school year 2022-2023. Five (5) participants will join for an in-depth interview (IDI), and six (5) of them will join for the focus group discussion (FGD). These participants teach in the school year 2022-2023 and have more than two years of experience in teaching English. A sample of ten (10) basic education teachers was purposefully selected from this population.

The researcher will use Purposeful sampling (also known as judgment, selective, or subjective sampling), a sampling technique in which the researcher relies on their judgment when choosing members of the population to participate in the study. This survey sampling method requires researchers to know the purpose of their studies in order to choose and approach eligible participants properly (Denzin, 2017).

This study's participants are senior high school teachers from Rizal Memorial Colleges, Inc., who have two years or more of experience as English teachers. Thus, the participants are also qualified for this study as they already have experience utilizing digital strategies in delivering their lessons and are able to manage problems related to this phenomenon.

Data Analysis

Qualitative data analysis begins with organizing, reducing, and describing the collected data (Schwandt, 2001). Unlike quantitative analysis, there are no prescribed formulas for qualitative analysis. Marshall and Rossman (2006) remind researchers that qualitative analysis does not proceed linearly and needs to be neat. However, good practice and procedures enhance the credibility of qualitative research.

In this last section, the data analysis procedures will be explained, and the steps taken to ensure the results from this study are credible, transferable, dependable, and authentic will be thoroughly described. To guide the data analysis, the researcher used the seven phases of data analysis described by Marshall and Rossman (2006) as a means to reduce data, create manageable pieces, allow for interpretation, and find meaning in the words of the participants. The seven phases included (a) organizing the data, (b) immersion in the data, (c) generating categories and themes, (d) coding the data, (e) offering interpretations through analytic memos, and (f) searching for alternative understandings (Marshall & Rossman, 2006).

Data analysis first begins with organizing the data. The organization of the data involved keeping information provided by each participant separate and in sequence with the order of the interviews. Organizing the data allowed it to remain manageable, easily accessible, and readily available. The digital audio files from the interviews were carefully transcribed into written form. Electronic folders were established to organize the data collected from each participant.

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Next, I became familiar with the data by reading the interviews extensively to understand their content. This involved reading through the interviews at least three times. Following Hatch's (2002) recommendations for qualitative analysis, the researcher created a sheet of notes for each participant. The summary sheets were a quick way to refer back to the original data as the data analysis continued (Hatch, 2002).

After the initial readings, Hatch (2002) recommends that researchers read the data completely with one typology in mind. Patton (2015) defines typologies as classification systems comprising categories that divide some aspects of the world into parts. According to Hatch (2002), typologies are generated from theory, common sense, or research objectives. For this study, the researcher used the typologies or themes from the literature review as the constructs to view the data.

RESULTS AND DISCUSSION

This chapter presents the implications and future directions derived from the findings. These implications and future directions aim to inform educators, policymakers, and researchers about the opportunities and challenges associated with implementing digital instructional strategies in literary education, ultimately contributing to the advancement of effective teaching practices and student learning outcomes.

Implications

The findings underscore the transformative potential of digital pedagogies in enhancing literary engagement and fostering critical thinking skills among students. By effectively integrating digital tools into instructional practices, educators can create dynamic and inclusive learning environments that cater to diverse learning styles and preferences. Through interactive platforms, multimedia resources, and gamification elements, students are motivated to actively participate in literary discussions, explore texts in depth, and develop a deeper connection with the material. Moreover, the implementation of adaptive learning technologies and blended learning models enables personalized learning experiences that address individual needs and promote cognitive skills development.

These results align closely with the principles of constructivism and experiential learning, which emphasize the importance of active engagement, collaboration, and the construction of knowledge through meaningful experiences. Constructivist theory posits that learners actively construct their understanding of the world by interacting with their environment and assimilating new information into existing cognitive structures. Digital pedagogies provide opportunities for students to engage in hands-on exploration of literary texts, fostering active learning experiences that align with constructivist principles. Likewise, experiential learning theory emphasizes the significance of reflection and experimentation in the learning process. By immersing students in interactive digital environments and encouraging them to experiment with different approaches to literary analysis, educators facilitate experiential learning opportunities that deepen understanding and promote critical thinking.

Furthermore, the integration of digital pedagogies underscores the importance of student-centered approaches to education, which prioritize individual needs, interests, and learning styles. Constructivist and experiential learning theories advocate for learner autonomy and the active construction of knowledge through authentic experiences. Digital pedagogies enable educators to design learning activities that empower students to take ownership of their learning journey, fostering independence and self-directed learning skills. By embracing these theories in the design and implementation of digital instructional strategies, educators can create meaningful learning experiences that prepare students for success in the 21st century.

The findings highlight the transformative impact of digital pedagogies on literary engagement and critical thinking skills development among students. By leveraging interactive platforms, multimedia resources, and gamification elements, educators can create dynamic and inclusive learning environments that cater to diverse learning styles and preferences. These results align closely with the principles of constructivism and experiential learning, emphasizing the importance of active engagement, collaboration, and meaningful experiences in the learning process. By embracing these theories in the design and implementation of digital instructional strategies, educators can empower students to become active participants in their learning journey and prepare them for success in an increasingly complex and interconnected world.

Future Directions

The following are the recommendations for future explorations of this study;

Department of Education may prioritize the integration of digital pedagogies into curriculum frameworks and provide comprehensive training and support for educators to effectively implement these strategies. This includes developing guidelines and standards for digital literacy and critical thinking skills development, as well as allocating resources for the acquisition of technology tools and infrastructure in schools.

School Administrators play a crucial role in fostering a conducive environment for digital pedagogy implementation. They may invest in professional development opportunities for teachers, provide access to relevant technology resources, and create policies that support innovative teaching practices. Additionally, administrators may facilitate collaboration among teachers and encourage the sharing of best practices in digital instruction.

Teachers may embrace a learner-centered approach to digital pedagogy, focusing on designing engaging and interactive learning experiences that promote critical thinking skills development. They may continuously seek opportunities for professional growth and stay updated on emerging technologies and pedagogical strategies. Moreover, teachers may collaborate with colleagues and leverage their expertise to enhance their digital instructional practices.

Students may encourage to take an active role in their learning journey by embracing digital tools and resources for independent study and exploration. They may develop digital literacy skills and critical thinking abilities through hands-on engagement with multimedia content, interactive platforms, and collaborative learning activities. Students may also be empowered to provide feedback on their learning experiences and contribute to the co-creation of digital learning environments.

Future Researchers Future researchers may explore the long-term effects of digital pedagogies on students' critical thinking skills development and academic achievement. Moreover, I suggest that the future researchers will explore the following;

Exploration of Augmented and Virtual Reality (AR/VR). Future researchers may delve deeper into the potential of AR/VR technologies in enriching literary instruction and fostering deeper engagement with literary texts. Future studies could explore the effectiveness of AR/VR simulations in creating immersive literary environments and the impact of interactive storytelling experiences on students' comprehension and appreciation of literature. Additionally, researchers could investigate the feasibility of integrating AR/VR tools into existing digital pedagogies and assess the practical implications for classroom implementation.

Quantitative Studies on Learning Outcomes. Conducting quantitative studies to measure specific learning outcomes associated with the implementation of digital pedagogies is essential. Future researchers may design rigorous empirical studies to assess the impact of digital instructional strategies on students' comprehension levels, critical thinking abilities, and engagement with literary texts. By employing standardized assessment tools and robust statistical analyses, researchers can provide valuable insights into the effectiveness of digital pedagogies in promoting critical thinking skills among learners.

Quasi-Experimental Designs with Control Groups. Utilizing quasi-experimental designs with control groups can offer valuable insights into the comparative effectiveness of different digital pedagogical interventions. Future research should employ randomized controlled trials or matched-pair designs to compare the effects of various digital teaching strategies on critical thinking outcomes. By rigorously controlling for confounding variables and establishing causal relationships between digital pedagogy and critical thinking skills, researchers can contribute to the evidence base supporting the implementation of effective instructional practices in literary education.

REFERENCES

1. *Abbasi, I., & Al-Sharqi, L. (2020). The Influence of Technology on English Language and Literature. English Language Teaching, 13(7), 1. https://doi.org/10.5539/elt.v13n7p1*
2. *Altınay, F., Dagli, G., & Altınay, Z. (2016). The Role of Information Technology in Becoming Learning Organization. Procedia Computer Science, 102, 663–667. https://doi.org/10.1016/j.procs.2016.09.459*
3. *Alvarez, A. (2020). Learning from the problems and challenges in blended learning: Basis for faculty development and program enhancement. https://files.eric.ed.gov/fulltext/EJ1285361.pdf*
4. *Anderson, V. (2020). A digital pedagogy pivot: re-thinking higher education practice from an HRD perspective. Human Resource Development International, 23(4), 452–467. https://doi.org/10.1080/13678868.2020.1778999*
5. *Ark, Tom Vander (2019). "The Shift to Digital Learning: 10 Benefits." Getting Smart, 2015. Beetham, Helen, and Rhona Sharpe. Rethinking Pedagogy for a Digital Age: Principles and Practices of Design. Routledge*
6. *Arvianti, I. (2023). View of Infusing Digital Technology In Critical Literacy Pedagogy To Generate Critical Thinker. Unnes.ac.id. https://proceeding.unnes.ac.id/utnc/article/view/2624/2080?fbclid=IwAR2FzlF9-2zDA2_BWRPR5ReMrKb2Dx1qA3CwIkrOQ-3PimZEAnVhZ2A9ooA*
7. *Ayu, M. (2020). Online Learning: Leading e-Learning at Higher Education. The Journal of English Literacy Education: The Teaching and Learning of English as a Foreign Language, 7(1), 47–54. https://doi.org/10.36706/jele.v7i1.11515*
8. *Barnard, R., Richards, J. C., & Rodgers, T. S. (2002). Approaches and Methods in Language Teaching. TESOL Quarterly, 36(4), 636. https://doi.org/10.2307/3588247*
9. *Belmont Report (1979). Ethical Principles and Guidelines for the Protection of Human Subjects of Research. Retrieved from https://www.hhs.gov/ohrp/regulations-and-policy/belmont-report/read-the-belmont-report/index.html*
10. *Boonmoh, A., & Phungphai, K. (2021). Students' Perception towards the Use of Rewards to Enhance Their Learning Behaviours and Self-Development. JEE (Journal of English Education), 7(1). https://doi.org/10.30606/jee.v7i1.637*
11. *Buabeng-Andoh, C. (2012). Factors influencing teachers' adoption and integration of information and communication technology into teaching: A review of the literature. International Journal of Education and Development Using Information and Communication Technology (IJEDICT), 8(1), 136–155. https://files.eric.ed.gov/fulltext/EJ1084227.pdf*
12. *Budnik Anzhela, & Iryna Khyzhniak. (2023). Using digital technologies and innovative methods to improve the reading skills of higher education students. Naukovij Vìsnik Pìvdennoukraïns'kogo Nacìonal'nogo Pedagogìčnogo Unìversitetu Ìm. K.D. Ušins'kogo, 2023(2 (143)), 61–67. https://doi.org/10.24195/2617-6688-2023-2-8*
13. *Castro, May Portuguez, and M.G. Gomez Zermeno (2020). "Challenge Based Learning: Innovative Pedagogy for Sustainability through e-Learning in Higher Education." Sustainability.*
14. *Caraig, G., Iyo, G. J., Kelechi, E. S., & Caraig, M. (2021). Integration of E-learning System through Mobile Technology. International Journal of Computing Sciences Research, 5(1), 459–474. https://doi.org/10.25147/ijcsr.2017.001.1.52*
15. *Coll, Sandyha (2016). "Pedagogy for Education on Sustainability: Integrating Digital Technologies and Learning Experiences Outside School (LEOS)." University of the South Pacific, vol. 1, pp. 1-25.*
16. *Congress of the Philippines (2012). Retrieved from https://en.wikipedia.org/wiki/15th_Congress_of_the_Philippines*
17. *Creswell, J. (2009). Research design: Qualitative, quantitative, and mixed-method approaches (4th ed.). SAGE. Cross, N., Howard, K., & Pearson, C. (2013). Culture: The missing link to learning. Leadership, 42(4), 36–37. https://doi.org/10.1016/j.socscimed.2016.07.015*
18. *Dangwal, Kiran Lata, and Shipra Srivastava (2023). "Digital Pedagogy in Teacher Education." International Journal of Information Science and Computing, vol. 3, no. 2, pp. 67-72. "Digital Pedagogy." Wikipedia, https://en.wikipedia. org/wiki/*
19. *Denzin, N. K., & Lincoln, Y. S. (Eds.). (2008). The landscape of qualitative research (3rd ed.). Sage Publications, Inc.*
20. *Digital_pedagogy. Mussell, James (2022). "Using Digital Resources in the Class." Journal of Victorian Culture, vol. 16, no. 1.*
21. *Elbaum, B., Vaughn, S., Hughes, M. T., Moody, S. W., & Schumm, J. S. (2000). A meta-analytic review of the effect of instructional grouping format on the reading outcomes of students with disabilities. In R. Gersten, E. Schiller, J. S. Schumm, & S. Vaughn (Eds.), Issues and research in special education, 105-135. Hillsdale, NJ: Erlbaum.*
22. *Gabriel, L. (2021). 42% of school-age Filipinos don't use devices for distance learning. SWS. https://www.google.com/amp/s/newsinfo.inquirer .net/1402187/42-of-school-age-filipinos-dontuse-devices-for-distance-learning-sws/amp*
23. *Galang, A. (2020). Philippine K To 12 Curriculum And Programme For International Student Assessment (Pisa) 2018 Reading Literacy Parallelism And Teaching-Learning Experiences. Eternal (English, Teaching, Learning, and Research Journal), 6(2), 275. https://doi.org/10.24252/eternal.v62.2020.a7*
24. *García, F. J. (2023). Digital and inclusive pedagogical competences of educators. Open Access Journal of Science, 6(1), 45–50. https://doi.org/10.15406/oajs.2023.06.00191*
25. *Garcia, M., & Piotrowski, A. (2022). (Re)Active Praxis: Humanizing Online English Teacher Education through Critical Digital Pedagogy. English Education, 54(2), 148–155. https://doi.org/10.58680/ee202231755*

26. *Giorgi, A. (2006). n book: The Sage Handbook of Qualitative Research In Psychology (pp.176-192) Edition: 2ndChapter: 11Publisher: SageEditors: Willig and Rogers*
27. *Hagerman, M., Beach, P., Cotnam-Kappel, M., & Cristyne Hébert. (2020). Multiple Perspectives on Digital Literacies Research Methods in Canada. 35(1).*
28. *Haleem, A., Javaid, M., Qadri, M. A., & Suman, R. (2022a). Understanding the role of digital technologies in education: A review. Sustainable Operations and Computers, 3(3), 275–285. Sciencedirect. https://www.sciencedirect.com/science/article/pii/S2666412722000137*
29. *Haleem, A., Javaid, M., Qadri, M. A., & Suman, R. (2022b). Understanding the role of digital technologies in education: A review. Sustainable Operations and Computers, 3(3), 275–285. Sciencedirect. https://www.sciencedirect.com/science/article/pii/S2666412722000137*
30. *Hatch, J. A. (2002). Doing qualitative research in education settings. Albany, NY: State University of New York Press.*
31. *Hassan, M. M., & Mirza, T. (2021). The Digital Literacy in Teachers of the Schools of Rajouri (J&K)-India: Teachers Perspective. International Journal of Education and Management Engineering, 11(1), 28–40. https://doi.org/10.5815/ijeme.2021.01.04*
32. *Hernandez Balba, C., L. Gindap, R. A., L. Ralla, P. J., Gabat Barbosa, K. A., Bermudez, J. B. E., Dulay, E. R., & Royeras, M. C. B. (2023). The Relationship between the Adoption of ICT and the Attitude of Senor High School Students in Davao City. International Multidisciplinary Research Journal, 5(1). https://doi.org/10.54476/ioer-imrj/289940*
33. *Ismawati, K. (2022). Student' perceptions of using Readtheory.org in reading comprehension. Jurnal.unigal.ac.id. https://jurnal.unigal.ac.id/index.php/jall/index*
34. *Kim, H. J., & Kim, H. (2017). Investigating Teachers' Pedagogical Experiences with Tablet Integration in Korean Rural Schools. The Asia-Pacific Education Researcher, 26(1-2), 107–116. https://doi.org/10.1007/s40299-017-0331-8*
35. *Kioupi, Vasiliki, and Nikolaos Voulvoulis (2023). "Education for Sustainable Development: A Systemic Framework for Connecting the SDGs to Educational Outcomes." Sustainability, 2019.*
36. *Khan, M., Muhammad, N., Ahmed, M., Saeed, F., & Khan, S. A. (2012). Impact of activitybased teaching on students' academic achievements in physics at secondary level. Academic Research International, 3(1), 146.*
37. *Lim, R., & Arcilla Jr., F. (2021). Mobile assisted language learning: Perspectives from senior high school students. International Research Journal of Science, Technology, Education, and Management, 1(2), 108–118. https://doi.org/10.5281/zenodo.5726387*
38. *Liu, H., Zhu, J., Duan, Y., Nie, Y., Deng, Z., Hong, X., Haugen, M., Baker, J. S., & Liang, W. (2022). Development and students' evaluation of a blended online and offline pedagogy for physical education theory curriculum in China during the COVID-19 pandemic. Educational Technology Research and Development, 70(6), 2235–2254. https://doi.org/10.1007/s11423-022-10131-x*
39. *Lewin, Cathy, et al. (2023). "Developing Digital Pedagogy through Learning Design: An Activity Theory Perspective." British Journal of Educational Technology, vol. 49, no. 6.*
40. *Locke, L. F., Spirduso, W. W., & Silverman, S. J. (2000). Proposals that work: A guide for planning dissertations and grant proposals (4th ed.). Thousand Oaks, CA: Sage Publications, Inc.*
41. *Maritsa, A., Hanifah Salsabila, U., Wafiq, M., Rahma Anindya, P., & Azhar Ma'shum, M. (2021). Pengaruh Teknologi Dalam Dunia Pendidikan. Al-Mutharahah: Jurnal Penelitian Dan Kajian Sosial Keagamaan, 18(2), 91–100. https://doi.org/10.46781/al-mutharahah.v18i2.303*
42. *Marshall, C., & Rossman, C. B. (2006). Designing qualitative research. Thousand Oaks, CA: Sage Publications, Inc.*
43. *Mbau, A. T., & Sugeng, B. (2019). Critical Literacy for ELT in Indonesia: What EFL Teachers should be Aware of. Journal of English Language Teaching and Linguistics, 4(2), 143. https://doi.org/10.21462/jeltl.v4i2.255*
44. *Mengorio, T. M., & Dumlao, R. (2019). The Effect of Integrating Mobile Application in Language Learning: An Experimental Study. JET (Journal of English Teaching), 5(1), 50. https://doi.org/10.33541/jet.v5i1.959*
45. *Mertens, D. M. (2005). Research and evaluation in education and psychology: Integrating diversity with quantitative, qualitative and mixed methods. Thousand Oaks, CA: Sage Publications, Inc.*
46. *Mfaume, H. (2019). Awareness and Use of a Mobile Phone as a Potential Pedagogical Tool among Secondary School Teachers in Tanzania. International Journal of Education and Development using Information and Communication Technology, 15(2), 154-170. https://files.eric.ed.gov/fulltext/EJ1220754.pdf*
47. *Miles, M. B., & Huberman, A. M. (2014). Qualitative data analysis: An expanded sourcebook (2nd ed.). Thousand Oaks, CA: Sage.*
48. *Muslimin, A. I., Mukminatien, N., & Ivone, F. M. (2023). TPACK-SAMR digital literacy competence, technostress, and teaching performance: Correlational study among EFL lecturers. Contemporary Educational Technology, 15(2), ep409. https://doi.org/10.30935/cedtech/12921*
49. *Nanjundaswamy, C., Baskaran, S., & Leela, M. H. (2021). Digital Pedagogy for Sustainable Learning. Shanlax International Journal of Education, 9(3), 179–185. https://doi.org/10.34293/education.v9i3.3881*
50. *Nanjundaswamy, C., Leela, M., & Baskaran, S. (2021). Shanlax International Journal of Education s h a n l a x Digital Pedagogy for Sustainable Learning C. Nanjundaswamy. https://files.eric.ed.gov/fulltext/EJ1300885.pdf*

51. *Newton, R. R., & Rudestam, K. E. (2001). Surviving your dissertation: A comprehensive guide of content and process. Thousand Oaks, CA: Sage Publications, Inc.*
52. *Nguyen, L. T., Kanjug, I., Lowatcharin, G., Manakul, T., Poonpon, K., Sarakorn, W., Somabut, A., Srisawasdi, N., Traiyarach, S., & Tuamsuk, K. (2022). How teachers manage their classroom in the digital learning environment – experiences from the University Smart Learning Project. Heliyon, 8(10), e10817. https://doi.org/10.1016/j.heliyon.2022.e10817*
53. *Niemi, H., Lavonen, J., Kallioniemi, A., & Toom, A. (2018). The Role of Teachers in the Finnish Educational System: High Professional Autonomy and Responsibility. In H. Niemi Toom, A. Kallioniemi, & J. Lavonen (Eds.), The Teacher's Role in the Changing Globalizing World: Resources and Challenges Related to the Professional Work of Teaching (pp. 47-61). Leiden: Brill Sense.*
54. *Nugroho, A., & Rahmawati, A. (2020). "LET'S WRITE A CAPTION!": UTILIZING INSTAGRAM TO ENHANCE ESP STUDENTS' WRITING SKILLS. JURNAL BASIS, 7(1), 1. https://doi.org/10.33884/basisupb.v7i1.1782*
55. *Park, T. J., Whang, J., Watts, S., & Han, D. G. (2022). Key success factors in the continuous use of MOOC education in South Korea. International Journal of Innovation and Learning, 31(2), 137. https://doi.org/10.1504/ijil.2022.120665*
56. *Parvin, R. H., & Salam, S. F. (2015). The Effectiveness of Using Technology in English Language Classrooms in Government Primary Schools in Bangladesh. FIRE: Forum for International Research in Education, 2(1). https://doi.org/10.18275/fire201502011049*
57. *Patton, M. (2005). Understanding research methods: An overview of the essentials. Glendale, CA: Pyrczak Publishing.*
58. *Patton, M. Q. (1990). Qualitative evaluation and research methods. Newbury Park, CA: Sage Publications, Inc.*
59. *Resty, C., Samosa, R., Policarpio, M., Cañamaque, B., Camocamo, H., Marie, J., Clavito, E., De San, C., & Arcangel, G. (2021). Gamification as an Innovative Strategy to Improve Learners' Writing Skills. International Journal of Academic Multidisciplinary Research (IJAMR), 5, 25–32. https://files.eric.ed.gov/fulltext/ED618330.pdf*
60. *Rudestam, K. E. & Newton, R. R. (2001). Surviving your dissertation: A comprehensive guide of content and process. Thousand Oaks, CA: Sage Publications, Inc.*
61. *Sanjaya, W. (2016). Strategi pembelajaraan berorientasi standar proses pendidikan. Kencana Prenada Media.*
62. *Santos, H., Batista, J., & Marques, R. P. (2019). Digital transformation in higher education: the use of communication technologies by students. Procedia Computer Science, 164, 123–130. https://doi.org/10.1016/j.procs.2019.12.163*
63. *Santoveña-Casal, S., & Susana Regina López. (2023). Mapping of digital pedagogies in higher education. Education and Information Technologies. https://doi.org/10.1007/s10639-023-11888-1*
64. *Scharmer, C. Otto (2022). Theory U: Leading from the Future as It Emerges. Berret-Koehler Publishers, 2009. Sipos, Yona, et al. "Achieving Transformative Sustainability Learning: Engaging Head, Hands and Heart." International Journal of Sustainability in Higher Education, vol. 9, no. 1, pp. 68-86.*
65. *Schensul, S. L., Schensul, J. J., and LeCompte, M. D. (1999). Essential Ethnographic Methods. In J.J. Schensul and M.D. LeCompte, Eds. The Ethnographer's Toolkit. Baltimore, MD: Altamira Press of Rowan and Littlefield.*
66. *Schwandt, T. A. (2001). Dictionary of qualitative inquiry. Thousand Oaks, CA: Sage Publications, Inc.*
67. *Seidman, I. (1998). Interviewing as qualitative research: A guide for researchers in education and the social sciences. New York: Teachers College Press*
68. *Soifah, U., Jana, P., & Pratolo, B. W. (2021). Unlocking digital literacy practices of EFL teachers. Journal of Physics: Conference Series, 1823(1), 012030. https://doi.org/10.1088/1742-6596/1823/1/012030*
69. *Song, S. J., Tan, K. H., & Awang, M. M. (2021). Generic Digital Equity Model in Education: Mobile-Assisted Personalized Learning (MAPL) through e-Modules. Sustainability, 13(19), 11115. https://doi.org/10.3390/su131911115*
70. *Takala, Annina, and Kati Korhonen-Yrjänheikki (2021). "A Decade of Finnish Engineering Education for Sustainable Development." International Journal of Sustainability in Higher Education, vol. 20, no. 1, pp. 170-186.*
71. *Torres-Toukoumidis, Á., & Mäeots, M. (2019). Implementation Of Gamification Strategies For The Enhancement Of Digital Competences. https://doi.org/10.21125/inted.2019.2356*
72. *Zainuddin, Z. (2017). First-Year College Students' Experiences in the EFL Flipped Classroom: A Case Study in Indonesia. International Journal of Instruction, 10(01), 133–150. https://doi.org/10.12973/iji.2017.1019a*