

Views on Digital Education and Innovative Research

Than Chhorn^{1*}

1* Corresponding author (editor-in-chief of JEILT), Journal of Education Innovation and Language Teaching (JEILT), chhornthan1984@gmail.com

2. Journal of Education Innovation and Language Teaching (JEILT), info@jeilt.org

To cite this article: Chhorn, T. (2026). Views on digital education and innovative research. *Journal of Education Innovation and Language Teaching (JEILT)*, 2 (1), 1-10

Abstract

Digital education and innovative research are the key factors in education and innovation. The digital-technological-education and research are suggested to shed in line with educational reforms and innovation of language teaching. With the AI applied in education, digital education (DE) and innovative-language-teaching (ILT) are explored, improving the teacher and student digital competence and skills. By transforming the DE and ILT, this study promoted teachers, scholars, students, and practitioners to research the effects and challenges in digital education and innovative-language-teaching, with the different research designs, such as analytical, descriptive, exploratory, explanatory, and predictive research designs. This further promoted teachers, scholars, and practitioners conduct the future studies on AI challenges and impacts in education, bettering the critical thinking, taking the problem-solving, and decision making. Digital education and innovative-language-teaching significantly contributes to the betterment of digital competence, skills, and literacy – reforming the educational quality and outcomes.

Keywords: *digital education, innovative-language-teaching, digital, innovation, reform, decision-making*

1. Views on Digital Education & Innovative-Language-Teaching

Digital education (DE) is the factor for developing to the education outcomes. Besides, innovative-language-teaching can access language teaching with the digital platforms (Chhorn, 2025; Giannoutsou et al., 2024; Ourn & Chhorn, 2025). Digital education research is needed to motivate and engage teachers, students, and scholars involve with DE and ILT frameworks (Chhorn et al., 2025; OECD, 2023). However, AI challenges in education and language teaching is limitedly researched in the era of DTT (James et al., 2021; Huot & Em, 2025; UNICEF, 2021). HEIs might promote teachers or students to develop the research in digital education and innovative-language-teaching (Balyer & Öz, 2018; Hang-chuon, 2021).

With 21st century education, DE is prioritized for educators or scholars to empower the digital education and innovative-language-teaching (MoEYS, 2019). Internet-digital devices significantly increased in research with digital

technology (Ministry of Post and Telecommunications [MPT], 2023). The index of school responsibility is low in DE and ILT (Ourn & Chhorn, 2025). DE and ILT affected the academic performance and educational outcomes (DASH et al., 2021; Nizariah, 2021) and ensured digital educational contents at all settings (Bates, 2015; UNESCO, 2023). Reforming the digital education system with internet-digital platforms contributes to education outcomes, enhancing online learning, and integrating the digital teaching and learning (Dirk et al., 2021; Forrester, 2016; OECD, 2017; Paulo, 2020).

DE & ILT involved the integration of digital technologies into the teaching and learning process, with internet platforms (Benavides et al., 2020; Alenezi, 2023), developing the critical thinking and digital learning platforms (Abad-Segura et al., 2020; Bisri et al., 2023; Mohamed Hashim et al., 2022; Rof et al., 2020; Shenkoya & Kim, 2023; Valdés et al., 2021). DE is challenged with the strategic and cultural barriers (Akhmetshin et al., 2020; Akour & Alenezi, 2022; Bucăța et al., 2022; Díaz-Garcia et al., 2023; Gkrimpizi et al., 2023; Gkrimpizi & Peristeras, 2022; Rima Aditya et al., 2021) and it influences the digital technological readiness, competencies, and skills (Elçiçek & Erdemci, 2021; Larionov et al., 2021; Latifah et al., 2022; Litiņa & Miltuze, 2023; Niță & Guțu, 2023; Valverde-Berrocso et al., 2022; Wekerle et al., 2022). DE and ILT proffers teachers the chance to better the students' critical thinking and use the digital framework-initiatives (Alenezi, 2021; Silva, 2017; Yureva et al., 2020).

4. AI Frameworks in DE and ILT

AI frameworks lies in a sense of responsibility with the future research in DE and ILT, reflecting the digital landscape and education outcomes (Culminas-colis & Reyes, 2024; Kim & Choi, 2018). AI challenges are the critical gaps for research frameworks in education and language teaching, such as critical thinking and problem -solving (James et al., 2021; Ribble & Bailey, 2007; Ribble & Park, 2019). AI collaborates with the future-research framework – being a set of technical competency and digital life (DQ Institute, 2019) and encompassing the use of digital technologies and embracing the teaching and learning digital-practices (Jones & Mitchell, 2016; Vuorikari et al., 2022; Yureva et al., 2020). AI framework is challenged for critical thinking in the DE and ILT settings (MoEYS, 2024; Öztürk, 2021). Further, AI in education shifts competency-based education, critical thinking, and problem-solving (Flores & Mean, 2024; Keo et al., 2024a; MoEYS, 2016; Pang et al., 2022). AI education sets out to integrate education system, with learning achievement and outcomes (Dirk et al., 2021; Hang-Chuon, 2021).

DE and ILT frameworks play a role in creating new internet-digital platforms. DE & ILT neglect the technical abilities increasingly support the success in reforming higher education quality (HEQ) (Khan et al., 2024). As the studies by Koehler et al. (2013), integrating technological knowledge into digital education and innovative-language-teaching foster the creativity in global digital-innovation ecosystems (Morel & Spector, 2022; MoEYS, 2024; NV, 2017; Paulo, 2020). Promoting the research on AI education prioritizes digital research literacy (UNESCO Institute for Statistics, 2018), high-research competencies (Gong et al., 2023; In-Seong et al., 2022; Sok & Heng, 2024), digital-research navigation (MoEYS, 2016), and digital teacher training (Timotheou et al., 2023; Yılmaz Özden, 2023).

5. Conclusion

Frameworks in digital education and innovative-language-teaching research involved engaging teachers, students, scholars, practitioners to cultivate the research knowledge and skills. The critical digital-research is the research trends challenging teachers, scholars, and/or practitioner. This shed in light with the AI utility integrated and navigated digital education and innovative-language teaching. DE and ILT should be applied int the context of reforming educational systems, strategies, and policies. This key insights of DE and ILT can leverage substantial digital-research extend educational settings, and integrate innovative-language-teaching and learning, in particular digital-educational-research practices and AI-research frameworks.

Reference

- Abad-Segura, E., González-Zamar, M. D., Infante-Moro, J. C., & Ruipérez García, G. (2020). Sustainable management of digital transformation in higher education: Global research trends. *Sustainability*, 12(5), 2107. <https://doi.org/10.3390/su12052107>
- Akhmetshin, E., Barmuta, K., Vasilev, V., Okagbue, H., & Ijezie, O. (2020, November). Principal directions of digital transformation of higher education system in sustainable education. *E3S Web of Conferences*, 208, 09042. <https://doi.org/10.1051/e3sconf/202020809042>
- Akour, M., & Alenezi, M. (2022). Higher education future in the era of digital transformation. *Education Sciences*, 12(11), 784.
- Alenezi, M. (2021). Deep Dive into Digital Transformation in Higher Education Institutions. *Education Science*, 1-13, <https://doi.org/10.3390/educsci11120770> <https://www.mdpi.com/journal/education>
- Alenezi, M. (2023). Digital learning and digital institution in higher education. *Education Sciences*, 13(1), 88.

- Benavides, L. M. C., Tamayo Arias, J. A., Arango Serna, M. D., Branch Bedoya, J. W., & Burgos, D. (2020). Digital transformation in higher education institutions: A systematic literature review. *Sensors*, 20(11), 3291.
- Bisri, A., Putri, A., & Rosmansyah, Y. (2023). A systematic literature review on digital transformation in higher education: Revealing key success factors. *International Journal of Emerging Technologies in Learning (Online)*, 18(14), 164.
- Bucăța, G., Popescu, F., & Tileagă, C. (2022, June). Digital transformation of higher education system. In *International conference knowledge-based organization* (28(1), 158-168). <https://doi.org/10.2478/kbo-2022-0025>
- Balyer, A., & Öz, Ö. (2018). Academicians' views on digital transformation in education. *International Online Journal of Education and Teaching (IOJET)*, Vol. 5(4), 809-830
- Bates, T. (2015). Teaching in a digital age: Guidelines for designing teaching and learning for a digital age. Retrieved on February 16, 2018 from <https://opentextbc.ca/teachinginadigitalage/>
- Chhorn, T. (2025). Overviews on JEILT Journal to Education Innovation and Language Teaching. *Journal of Education Innovation and Language Teaching (JEILT)*, 1(1), 1-9. DOI: <https://doi.org/10.63381/jeilt.v1i1.37>
- Chhorn et al. (2025). Transforming on Digital Education: Perceptions of Teachers and Students at High School, in Cambodia. *Journal of Education Innovation and Language Teaching (JEILT)*, 1(1), 21-33. DOI: <https://doi.org/10.63381/jeilt.v1i1.26>
- Culminas-Colis, M. V., & Reyes, W. S. (2024). Integrating digital citizenship in social studies. *Journal of Research, Policy & Practice of Teachers & Teacher Education*, 14(2), 1–14. <https://doi.org/10.37134/jrpptte.vol14.2.1.2024>
- Dash, T., Yem, B., & An, S. (2021). COVID–19, digital transformation, and skills gap among the Cambodian young labor force. In R. Hör & T. Hesketh (Eds.), *Future of work digital insights* (4th ed., pp. 216–225).
- Díaz-Garcia, V., Montero-Navarro, A., Rodríguez-Sánchez, J. L., & Gallego-Losada, R. (2023). Managing digital transformation: A case study in a higher education institution. *Electronics*, 12(11), 2522.
- Dirk, I., Sandra, H., Marc, E., & Christian, H. (2021). Digital Transformation of Learning Organizations. Springer OPEN, <https://doi.org/10.1007/978-3-030-55878-9>

- DQ Institute. (2019). *DQ global standards report 2019: Common framework for digital literacy, skills and readiness*. DQ Institute.
- Elçiçek, M., & Erdemci, H. (2021). Investigation of 21st-century competencies and e-learning readiness of higher education students on the verge of digital transformation. *Journal of Computer and Education Research*, 9(17), 80-101.
- Flores, E. P., & Mean, U. (2024). Digital transformation in Cambodian higher education and its impact on teaching and learning outcomes. *Journal of Accounting, Finance, Economics, and Social Sciences*, 9(1), 23–34. [https://doi.org/10.62458/jafess9\(1\)3](https://doi.org/10.62458/jafess9(1)3)
- Forrester. (2016) Leading Digital Business Transformation. [Online] Forrester Research, Inc. [20Oct2017] Available: <https://www.imd.org/l/dbt/digital-business-transformation>
- Giannoutsou, N., Ioannou, A., Timotheou, S., Miliou, O., Dimitriadis, Y., Cachia, R., Villagrà-Sobrino, & Martínez-Monés, A. (2024). *Unpacking the impact of digital technologies in education: Literature review and assessment framework*. Publications Office of the European Union. <https://doi.org/10.2760/214675>
- Gkrimpizi, T., & Peristeras, V. (2022, October). Barriers to digital transformation in higher education institutions. In *Proceedings of the 15th International Conference on Theory and Practice of Electronic Governance* (pp. 154-160). <https://doi.org/10.1145/3560107.3560135>
- Gkrimpizi, T., Peristeras, V., & Magnisalis, I. (2023). Classification of barriers to digital transformation in higher education institutions: Systematic literature review. *Education Sciences*, 13(7), 746.
- Gong, Z., Wang, M., Nanjappan, V., Georgiev, G.V. (2023). Effects of Digital Technologies on Cultural Factors in Creativity Enhancement. In: Chakrabarti, A., Singh, V. (eds) *Design in the Era of Industry 4.0*, Volume 3. ICORD 2023. Smart Innovation, Systems and Technologies, vol 346. Springer, Singapore. https://doi.org/10.1007/978-981-99-0428-0_32
- Hang-Chuon, N. (2021). *Digital Transformation in Education*. Ministry of Education, Youth and Sports. *Journal of Education Innovation and Language Teaching (JEILT)*, 1(1), 53-75. DOI: <https://doi.org/10.63381/jeilt.v1i1.38>

- Huot, S., & Em, S. (2025). Effective Strategies of English Teaching in Cambodia's Underserved Communities: Bridging Digital Divide to Access Education Quality
- In-Seong, J., Sang-Mok, J., & Ki-Sang, S. (2022). Design and development of ICT major curriculum for pre-service teacher in developing countries: Focused on Cambodia. *Edutainment Research*, 4(2), 121–137. <https://doi.org/10.36237/koedus.4.2.121>
- James, C., Weinstein, E., & Mendoza, K. (2021). Teaching digital citizens in today's world: Research and insights behind the commonsense K-12 digital citizenship curriculum. Common Sense Media. https://openlab.bmcc.cuny.edu/edu-210-b18l-fall-2023-j-longley/wp-content/uploads/sites/3085/2023/04/common_sense_education_digital_citizenship_research_backgrounder-2-copy.pdf
- Jones, L. M., & Mitchell, K. J. (2016). Defining and measuring youth digital citizenship. *New Media & Society*, 18(9), 2063–2079. <https://doi.org/10.1177/1461444815577797>
- Keo, V., Sam, R., Lan, B., & Rouet, W. (2024). Challenges and opportunities of educational technology integration in Cambodian higher education institutions: A literature review. *International Journal of Education, Psychology and Counselling (IJEPC)*, 9(54). <https://gaexcellence.com/ijepc/article/view/285>
- Khan, S. K., Sohail, A., & Kashif, M. F. (2024). Toward Digital Resilience: Strategies for Promoting Positive Mental Health in the Age of Social Media. *Global Management Sciences Review*, IX(I), 12-23. [https://doi.org/10.31703/gmsr.2024\(IX-I\).02](https://doi.org/10.31703/gmsr.2024(IX-I).02)
- Kim, M., & Choi, D. (2018). Development of youth Digital Citizenship Scale and implication for educational setting. *Educational Technology & Society*, 21(1), 155–171.
- Koehler, M. J., Mishra, P., & Cain, W. (2013). What is technological pedagogical content knowledge (TPACK)? *Journal of Education*, 193(3), 13–19. <https://doi.org/10.1177/002205741319300303>
- Larionov, V. G., Sheremetyeva, E. N., & Gorshkova, L. A. (2021). Digital transformation of higher education: Technologies and digital competencies. *Bulletin of the Astrakhan State Technical University. Series: Economics*, (2), 61-69.
- Latifah, R., Budiyanto, C. W., & Saputro, H. (2022). Digital transformation readiness in education: A review. *International Journal of Information and Education Technology*, 12(8), 809-815.

- Litiņa, S., & Miltuze, A. (2023). Factors influencing digital competence of higher education students: A scoping review. *Human, Technologies and Quality of Education*, 2023. <https://doi.org/10.22364/htqe.2023.36>.
- Ministry of Post and Telecommunications. (2023). *Cambodia Child Online Protection Guideline for the Digital Technology Industry*. <https://www.unicef.org/cambodia/media/7751/file/Cambodian%20Child%20Online%20Protection%20Guidelines.pdf>
- MoEYS (2019). *Educational Strategy Plan 2019-2023*. Ministry of Education, Youth and Sports
- Mohamed Hashim, M. A., Tlemsani, I. and Matthews, R. (2022). Higher education strategy in digital transformation. *Education and Information Technologies*, 27(3), 3171-3195.
- MoEYS. (2016). *Curriculum framework for general education and technical education*.
- MoEYS. (2024). *Education strategic plan 2024-2028* (Issue June).
- Morel, G. M., & Spector, J. M. (2022). *Foundations of educational technology: Integrative approaches and interdisciplinary perspectives*. Routledge.
- Niță, V., & Guțu, I. (2023). The Role of leadership and digital transformation in higher education students' work engagement. *International Journal of Environmental Research and Public Health*, 20(6), 5124.
- Nizariah, S. (2021). The impact of technology on adolescent social change: A case study on the use of social media. *Proceedings of the 2nd International Conference on Science, Technology, and Modern Society (ICSTMS 2020)*, 576, 500–502. <https://doi.org/10.2991/assehr.k.210909.106>
- NV. (2017) Digital Transformation in Higher Education. [Online] Navitas Ventures. [20Oct2017] Available: https://www.navitasventures.com/wp-content/uploads/2017/08/HE-Digital-Transformation-_Navitas_Ventures_-EN.pdf
- OECD. (2017). Key Issues for Digital Transformation in The G20. OECD
- OECD. (2023). *OECD digital education outlook 2023: Towards an effective digital education ecosystem*. OECD Publishing. <https://doi.org/10.1787/c74f03de-en>
- Öztürk, G. (2021). Digital citizenship and its teaching: A literature review. *Journal of Educational Technology & Online Learning*, 4(1), 31-45.

- Pang, S., Nhor, R., & Em, S. (2022). Cambodian teachers' readiness of using ICT: The case of rural upper-secondary schools. *Jurnal As-Salam*, 6(2), 145–162. <https://doi.org/10.37249/assalam.v6i2.432>
- Paulo, S. (2020). A System Approach to Digital Education. UNICEF-Timor-Leste, Conference Reimagine Education: ICT & Innovation in Timor-Leste
- Raab, M., & Griffin-Cryan, B. (2011). Digital Transformation of Supply Chains: Creating Value –When Digital Meets Physical: Capgemini Consulting
- Ribble, M., & Bailey, G. D. (2007). *Digital citizenship in schools*. International Society for Technology in Education.
- Ribble, M., & Park, M. (2019). *The digital citizenship handbook for school leaders: Fostering positive interactions online*. International Society for Technology in Education.
- Rima Aditya, B., Ferdiana, R., & Suning Kusumawardani, S. (2021, May). Digital transformation in higher education: A barrier framework. In *2021 3rd International Conference on Modern Educational Technology*, 100-106. <https://doi.org/10.1145/3468978.3468995>
- Rof, A., Bikfalvi, A., & Marquès, P. (2020). Digital transformation for business model innovation in higher education: Overcoming the tensions. *Sustainability*, 12(12), 4980.
- Shenkoya, T., & Kim, E. (2023). Sustainability in higher education: Digital transformation of the fourth industrial revolution and its impact on open knowledge. *Sustainability*, 15(3), 2473.
- Silva, L. (2017). Challenges of Digital Transformation in Higher Education Institutions: A brief discussion. ResearchGate, Conference paper, <https://www.researchgate.net/publication/330601808>
- Sok, S., & Heng, K. (2024). Research on teacher education and implications for improving the quality of teacher education in Cambodia. *International Journal of Professional Development, Learners and Learning*, 6(1), ep2401. <https://doi.org/10.30935/ijpdll/14042>
- Timotheou, S., Miliou, O., Dimitriadis, Y., Sobrino, S. V., Giannoutsou, N., Cachia, R., Monés, A. M., & Ioannou, A. (2023). Impacts of digital technologies on education and factors influencing schools' digital capacity and transformation: A literature review. In *Education and Information Technologies*, 28(6), 6695–6726. <https://doi.org/10.1007/s10639-022-11431-8>
- UNESCO. (2023). *Digital citizenship in Asia-Pacific: Translating competencies for teacher innovation and student resilience*. UNESCO Office

- Bangkok and Regional Bureau for Education in Asia and the Pacific.
<https://unesdoc.unesco.org/ark:/48223/pf0000385426>
- UNESCO Institute for Statistics. (2018). A global framework of reference on digital literacy skills for indicator 4.4.2. *UNESCO Institute for Statistics*, 51. <https://uis.unesco.org/sites/default/files/documents/ip51-global-framework-reference-digital-literacy-skills-2018-en.pdf>
- UNICEF. (2021). *Digital literacy in education systems: Key insights and opinions of young people*. UNICEF East Asia and Pacific Regional Office. [https://www.unicef.org/eap/media/7766/file/Digital%20Literacy %20in%20Education%20Systems%20Across%20ASEAN%20Cover.pdf](https://www.unicef.org/eap/media/7766/file/Digital%20Literacy%20in%20Education%20Systems%20Across%20ASEAN%20Cover.pdf)
- Ourn, V. & Chhorn, T. (2025). Teachers' perceptions on digital teaching transformation in Cambodian education context. *Journal of Education Innovation and Language Teaching (JEILT)*, 1(1), 10-20. DOI: <https://doi.org/10.63381/jeilt.v1i1.24>
- Ourn, V., & Chhorn, T. (2025). Teachers' challenges in transforming the digital teaching in Cambodian context. *Journal of Education Innovation and Language Teaching (JEILT)*, 1 (1), 76-87. DOI: <https://doi.org/10.63381/jeilt.v1i1.52>
- Valdés, K. N., y Alpera, S. Q., & Cerdá Suárez, L. M. (2021). An institutional perspective for evaluating digital transformation in higher education: Insights from the Chilean case. *Sustainability*, 13(17), 9850.
- Valverde-Berrocso, J., Acevedo-Borrega, J., & Cerezo-Pizarro, M. (2022, June). Educational technology and student performance: A systematic review. *Frontiers in Education*, 7, 916502. <https://doi.org/10.3389/feduc.2022.916502>
- Vuorikari, R., Kluzer, S., & Punie, Y. (2022). *DigComp 2.2, The Digital Competence framework for citizens – with new examples of knowledge, skills and attitudes*. Publications Office of the European Union. <https://data.europa.eu/doi/10.2760/115376>
- Wekerle, C., Daumiller, M., & Kollar, I. (2022). Using digital technology to promote higher education learning: The importance of different learning activities and their relations to learning outcomes. *Journal of Research on Technology in Education*, 54(1), 1-17.
- Yılmaz Özden, Ş. (2023). Investigating the relationship between digital instructional material development self-efficacy, digital literacy and critical thinking disposition. *Journal of Educational Technology & Online Learning*, 6(4), 911-92

Yureva, O. V., Burganova, L. A., Kukushkina, O. Y., Myagkov, G. P., & Syradoev, D. V. (2020). Digital Transformation and Its Risks in Higher Education: Students' and Teachers' Attitude. *Universal Journal of Educational Research*, 8(11B), 5965 - 5971. DOI: <https://doi.org/10.13189/ujer.2020.082232>