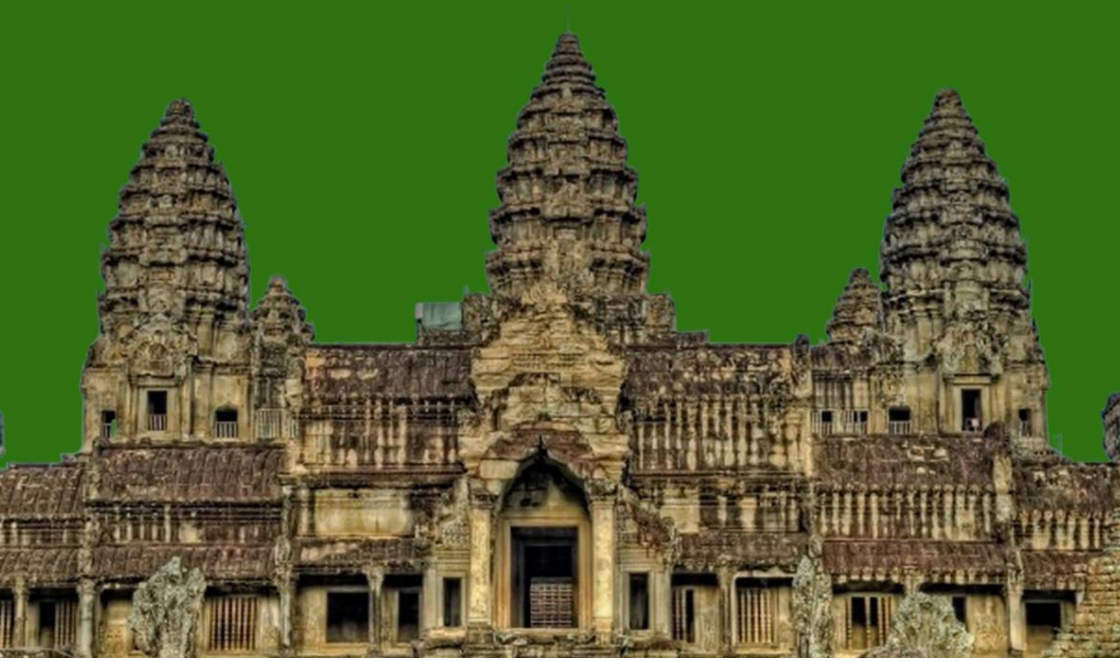
https://jeilt.org

ISSN:3080-4760 (Online)
ISSN:3080-0471 (Print)
DOI: https://doi.org/10.63381/jeilt.v1i1

Vol. 1(1)

June 2025

Journal of Education Innovation and Language Teaching



Insight

Journal of Education Innovation and Language Teaching (JEILT)

Volume 1, No. 1, January – June 2025

Access to online publication: https://jeilt.org/index.php/jeilt
Email: info@jeilt.org
Hosted location: Phnom Penh, Cambodia
E-ISSN: 3080-4760 (Online); P-ISSN: 3080-0471 (Print)
DOI: https://doi.org/10.63381/jeilt.v1i1
Web of Science ORCID: https://orcid.org/0009-0001-1140-2318
E-ISSN Portal: https://portal.issn.org/resource/ISSN/3080-4760
P-ISSN Portal: https://portal.issn.org/resource/ISSN/3080-0471#

Data available
JEILT Journal in Publication Data
Typeset by JEILT Publisher, Phnom Penh, Cambodia
Hosted in JEILT Journal (Online)
Printed in Cambodia

Journal of Education Innovation & Language Teaching (JEILT)
Peer-Reviewed Journal; Vol. 1, No. 1, 2025
ISSN:3080-4760 (Online); ISSN: 3080-0471 (Print)
DOI: https://doi.org/10.63381/jeilt.v1i1
https://jeilt.org
info@jeilt.org

Insight

Journal of Education Innovation and Language Teaching (JEILT)

ISSN:3080-4760 (Online); ISSN: 3080-0471 (Print)
DOI: https://doi.org/10.63381/jeilt.v1i1

Publishing Office

Journal of Educational Innovation and Language Teaching (JEILT)
JEITL Publisher
Address: #1535, Street Betong, Lavea Village, Snagkat Chaum Chao II, Khan Posenchey, Phnom Penh, Cambodia, 12010
Tel: +855 12 53 54 80
Email: ingfo@jeilt.org
Website: https://jeilt.org
Sub-website: https://jeilt.org/index.php/jeilt

Publication History:
Access to online publication: 2025-06-06

About the Publisher:
JEILT Journal

ISSN:3080-4760 (Online); ISSN: 3080-0471 (Print)
DOI: https://doi.org/10.63381/jeilt.v1i1

Insight

Journal of Education Innovation and Language Teaching (JEILT)

Volume 1, No. 1, January – June 2025

Overviews on JEILT Journal to Education Innovation and Language Teaching 1-9
Than Chhorn

Teachers' Perceptions on Digital Teaching Transformation in Cambodian Education Context 10-20
Vanna Ourn, Than Chhorn

Transforming on Digital Education: Perceptions of Teachers and Students at High School, in Cambodia 21-33
Than Chhorn, Linn Chau, Saroeun Mao, Chanthan Loch, Sreybandith Chhouk

Evolution of Curriculum Standards: A Comprehensive Review of Historical Development 34-52
Sereyrath Em, Buratin Khampirat

Effective Strategies of English Teaching in Cambodia's Underserved Communities: Bridging Digital Divide to Access Education Quality 53-75
Sovanna Huot, Sereyrath Em

Teachers' Challenges in Transforming the Digital Teaching in Cambodian Context 76-87
Vanna Ourn, Than Chhorn

Publication History:
Access to online publication: 2025-06-06

About the Publisher:
JEILT Journal

Journal of Education Innovation & Language Teaching (JEILT)
Peer-Reviewed Journal; Vol. 1, No. 1, pp 1-9, 2025
ISSN:3080-4760 (Online); ISSN: 3080-0471 (Print)
DOI: https://doi.org/10.63381/jeilt.v1i1.37

https://jeilt.org
info@jeilt.org

Overviews on JEILT Journal to Education Innovation and Language Teaching

Than Chhorn (PhD)[1*]

1* Corresponding author, National Institute of Education, chhornthan1984@gmail.com

To cite this article: Chhorn, T. (2025). Overviews on JEILT journal to educational innovation and language teaching. *Journal of Education Innovation and Language Teaching (JEILT)*, *1* (1), 1-9

Abstract

Journal of Education Innovation and Language Teaching (JEILT) is officially launched on the 10th of February 2025 by the founder, Than Chhorn (PhD). It is an online access journal. JEILT is a double-blind and peer-reviewed journal, serving as a dynamic platform for disseminating and exchanging academic research relevant to education, innovation, language, and teaching in the Cambodian and global contexts. JEILT journal invites scholars, researchers, and practitioners to engage in critical analysis and discussions on the themes of psycho-pedagogical practice, education betterment, curriculum or syllabi development, language acquisition, linguistics, applied linguistics, digital education, educational policy and reform, and technology-enhanced teaching and learning. The primary objectives of JEILT are to foster knowledge sharing and intellectual discourse while addressing the challenges in education and language instruction. It aims to reach policymakers, educators, and academic institutions by offering variations of perspectives on emerging trends and best practices in teaching and learning. Additionally, JEILT is committed to supporting initiatives that enhance educational quality, promote multilingual education, educational digitalization, and contribute to sustainable educational development beyond the Cambodian and global contexts.

Keywords: *Education; Innovation, Language Teaching, Linguistics, Psycho-pedagogy*

1. Introduction

JEILT Journal is officially launched to promote the research on education, innovation, language acquisition, linguistics, applied linguistics, and psycho-pedagogical practice. This journal is double-blind, peer-reviewed, and online access. It most commonly serves as a dynamic platform for disseminating and sharing academic research related to the innovation and best practice of education and language teaching in Cambodia and worldwide. However, JEILT is a journal that invites the scholars, researchers, and practitioners to engage in critical analysis and discussions on the challenges and practices of the psycho-pedagogy, education, language teaching, applied linguistics, and technology-enhanced teaching and learning. The key objectives of JEILT journal foster knowledge sharing and intellectual discourse. It aims to reach the policymakers, educators, and academic institutions by proffering diverse perspectives on theories, trends, and best practices of teaching.

Article-Review History:
Received: 2025-02-11; Revised: 2025-02-28; Accepted: 2025-03-04

About the Author:
Chhorn

Journal of Education Innovation & Language Teaching (JEILT)
Peer-Reviewed Journal; Vol. 1, No. 1, pp 1-9, 2025
ISSN:3080-4760 (Online); ISSN: 3080-0471 (Print)
DOI: https://doi.org/10.63381/jeilt.v1i1.37
https://jeilt.org
info@jeilt.org

Digitalization is the need to education transformation that focuses on digital teaching and learning and better the quality of education (MoEYS, 2019). Digital education is the digital systems to effectively develop the education in Cambodia. In addition, digital education transformation is set with aim of reforming and advancing the teaching and learning quality, developing the digital human resources, and streamlining technology-enhanced teaching and learning. The innovation and digitalization in education and language teaching is a useful mission for all educational institutions. Integration of the digital technologies is very important for the education and language teaching (Dirk et al., 2021).

Digital education provides the insight into how education changes through the adoption of digital technology. However, digital teaching and learning must be based on the needs of students. Digital education is a response to era of technologies to reform training and schools, to build the digital human resources with technological skills (Hang-Chuon, 2021). Digital platform and systems help create the e-learning and teaching to support digital education and language teaching. Digital literacy is an essential skill to boost the 21st century education, with the web-base and electronic devices.

Digitalization in education and language teaching is a key factor in improving education quality and succeeding language teaching. Digital transformation significantly contributes to development of digital education and innovation of digital language instruction in school. With the development of ICT, digital devices are used in digital transformation to determine the advancement of education (Parlak, 2017). Otherwise, digital transformation can be the digital system that meet the need of the technology use in language teaching and learning (Taşkıran, 2017). Digital transformation has the profound effects on the education and language teaching (Balyer & Öz, 2018). Therefore, digital transformation is the system and framework for the digital education and language teaching.

In brief, JEILT journal aims to invites scholars, researchers, and practitioners to engage in critical analysis and discussions on themes, as such education innovation and language teaching. This journal purposively promotes the scholars and practitioners share the researched results related to psycho-pedagogical practice, education innovation, language teaching and learning, applied linguistics, and technology-enhanced teaching and learning. It is to reach policymakers, educators, and academic institutions by offering diverse perspectives on theories, trends, and best practices of digital education and language teaching.

Article-Review History:
Received: 2025-02-11; Revised: 2025-02-28; Accepted: 2025-03-04

About the Author:
Chhorn

2. Conceptual Frameworks of JELIT Journal

JEILT journal has a purposive framework, as such home, about, publications, submission, guideline, conference, call for papers, announcements, and register or login. Home mentions about the journal and contact us. About comprises about journal, editorial team, journal policies, privacy statement, and copyright notice. About journal covers overview, vision, mission, and goal. Editorial team states the advisory boards, editor-in-chief, editors, peer-reviews, assistances, and publishing office. Journal policies most commonly consists of focus and scope, editorial policy, publication policy, peer-review process, publication frequency, open-access policy, publication ethics, acceptance and publication, submission policy and procedure, screening for plagiarism, free of charge, indexing and abstracting, journal registry and quality. Publications address the issues, special issues, book publications, search, current, and archives. Submission provides the platform of article, book, book-review, literature/article-review, and book-chapter submitting. Guideline of JEILT journal focuses on author guidelines, reviewer guidelines, reviewer forms, JEILT templates, and information for readers, authors, and librarians. Call-for-papers expresses call for articles/article-reviews/book-reviews and call for book/book-chapters.

3. Scope and Focus of JELIT Journal

Journal of Educational Innovation and Language Teaching (JEILT) welcomes all original manuscripts (papers) or books in any discipline, field, and subject where the theory, concept, new idea, innovation, technology, best practices, and lessons learned are introduced, related to the education innovation and language teaching. Original manuscript can be either academic or applied research in English from the national or international that contributes to the social, economic, and environmental development. The journal accepts all fields and disciplines, which may prioritize research scopes and focus. JEILT journal publishes the original research articles, article/book reviews, and original books biannually based on empirical data, as well as theoretical, conceptual and methodological manuscripts. Embracing scholarly resources, the JEILT Journal welcomes manuscripts on the practice and innovation of education and language teaching at all educational levels. In this effort, JEILT journal encourages the authors to publish the original manuscripts/papers and books, focused on (1) the educational traits, trends, and innovation, (2) language teaching (3) psycho-pedagogical practice, (4) transformation of digital education, (5) teaching methods, (6) linguistics and applied linguistics, (7) technological development in education, (8) management in education,

Article-Review History:
Received: 2025-02-11; Revised: 2025-02-28; Accepted: 2025-03-04

About the Author:
Chhorn

(9) curriculum development, (10) school improvement, and psychological education.

4. Perspectives of Education Digitalization and Innovation

With the era of digital technology, digitalization is popular for necessity of changes and improvements in system, methods, and process of education (Bates, 2015). Education reform and technological innovation significantly contributes to the out-of-school and lifelong learning (Sisman, 2016). Digital education transformation can be achieved by involving all sections of the society and individual needs (Balyer & Öz, 2018). Digital education can help develop the technological knowledge and digital skills for teachers or leaners. In this sense, digital capability helps the teachers and students develop the methods and techniques of teaching and learning to meet the betterment of education quality.

Digital competence is the ability to use digital devices in teaching, learning, managing, analyzing, and sharing information or workflows. For this situation, the ability to use ICT in the teaching and learning process where the quality of education is to reform and transform (Paulo, 2020). Within the digital education framework, digital skill is the goal to improve the digital capability of teachers and students. Innovative educational technology is centralized as the educational factors to process the digital education system (Dirk et al., 2021). In the context of 21st century-education, technological innovation connects people to the world by using Internet platforms and enriches open data and search platforms (Paunescu et al., 2022).

Transformation of digital education is about the educational digitalization in the different contexts. Further, digital transformation can be regenerated to support the distance education and e-teaching and learning (Forrester, 2016; IDC, 2015; OECD, 2017). Digital education transformation of HEIs is ongoing of digital process in advancing the higher education quality (Hang-chuon 2021; NV, 2017). Digitalization of education innovation highly impacts the education systems and learning environment, proffers a framework for the reform of education policy and system, and helps develop the quality of digital education (Balyer & Öz, 2018). Higher education institutions (HEIs) had been emerging the technologies as a means of bettering educational practices. Digital education transformation is the key missions for academic institutions to develop the quality teaching and learning outcomes (Paulo, 2020). Digital technology contributes to development of digital systems, online-experimental-learning, collaborative teaching and learning.

Innovation of digital-technology-education is an overview for educational institutions in Cambodia. Digital education transformation gives the insights

Article-Review History:
Received: 2025-02-11; Revised: 2025-02-28; Accepted: 2025-03-04

About the Author:
Chhorn

into how the education systems are reformed and changed through the digital-technology-adoption (Dirk et al., 2021). Media-education perspective supports education in process of transforming from a performance-oriented education and media perspective. Using the ICT devices sustainably and effectively, HEIs are driven by new ways of collaborating to share knowledge and resources (Paunescu et al., 2022). Digital strategy of education helps the educational institutions to achieve the intended goals, being under pressure to provide innovative digital-experiences for stakeholders.

For this mean, educational institutions should examine digital as a whole by developing the digital thinking and using digital frameworks to manage all digital initiatives and approaches (Silva, 2017). Digital strategies for the education systems, ICT application in education, and creation of the digital infrastructure in education (Paulo, 2020). Digital technology is the support to process of digital teaching and learning - providing the rich resources to turn teaching and learning into the classroom practice. The vision for digital education is directly linked to the digitalization process in line with the global trends of digital human resource development in society (Yurev et al., 2020). In the era of digital transformation, the educational institutions embrace digital-educational-practices. Digitalization in higher education advances the best practices of higher digital-education (Alenezi, 2021).

5. Perspectives and Trends of Language Teaching

The challenges, made teachers faced in the transforming the digital teaching at the academic institutions, provides how to acquire language. Language teaching is a platform that makes language instructors be complicated to teaching non-native learners. With language acquisition, language teachers and learners are suggested to familiarize with the phonology, lexicology, morphology, syntaxology, semanticology, pragmaticology, stylicology, and discoursology. This is a mean of language teaching to enrich the trends of language acquisition in 21st century-language education. To boost language teaching, digital teaching is the need to better critical thinking of language learners. With cognizance of linguistics, teachers or learners are required to know how to use the language for communication (Chhorn, 2025).

With the trends of language teaching, linguistics perspective is remained the need to present language issues and problems in the real world (Davies & Elder, 2004). Of course, language is central to conditions of communication, and language issues are complex and longstanding (Brumfit, 2004; Bygate, 2005; Widdowson, 2006). Applied linguistics is emphasized to disciplinary resources used to work on the language problems (Grabe & Kaplan, 1996). Applied linguistics extends in a systematic way beyond language teaching

issues. This encompasses language assessment, policy and planning, use in professional settings, translation, lexicography, bilingualism/multilingualism, language and technology, and corpus linguistics.

The disciplines of linguistics focus on the anthropology, education, language inquiries (composition, rhetoric, and literary studies), modern languages, language policy studies, political sciences, psychology, public administration, and sociology. Linguistics-parallel-coevolution needs to understand how and why linguistics is broadly defined. Likely, generative linguistics dominates the linguistics landscape, competing formal theories where are available. In this sense, sociolinguistics claims language variation, spoken discourse analysis, and social uses of language. By practicing the applied linguists, abstractness of generative linguistics is central as assumption of a language acquisition device. In fact, applied linguists turns to language knowledge with cognition and description (Robinson & Ellis, 2008).

Language can be explained to explicitly drive the language uses, as corpus linguistics, descriptive grammars, sociolinguistics (Biber et al., 1999; Carter & McCarthy, 2006). Language theories present the realistic applicability to the sorts of language issues (Doughty & Long, 2003; Kroll & de Groot, 2005). Linguistics is still central to the areas of inquiring applied linguistics that are recognized as umbrella discipline of applied linguistics. Language knowledge of various types is crucial for description and analysis of language, language learning, language uses, and language assessment. In this case, the language learners are required to draw on knowledge bases of phonetics, phonology, morphology, syntax, semantics, pragmatics, and written discourse.

In research of applied linguistics, the shift to analyzing discourse, description, and language interpretation in the social or cultural settings indicate a value of observable language (van Lier, 1997). The useful perspectives arisen out of relevant linguistics is about the advancement of register analysis, genre analysis, and resource of corpus linguistics as application to a wide range of language use and learning situations (McCarthy, 2008). The approach to analyzing linguistics, along with the techniques to analyzing discourse, is hallmarks of research on applied linguistics. In fact, applied linguists have carried out the research on applied linguistics as a genuine role for linguistics, with formal linguistics based upon the real-world and problem-base

7. Concluding Remarks

JEILT journal is launched to promote the research shares on innovation and language teaching. JEILT is a double-blinded, peer-reviewed research journal, publishes and shares the scientific research results to the real world. Digital education transformation helps develop the teaching and learning methods,

Article-Review History:
Received: 2025-02-11; Revised: 2025-02-28; Accepted: 2025-03-04
About the Author:
Chhorn

improve the digital education quality, and ensure the effectiveness of digital education. The views of digital education and language teaching offers the chance to identify challenges and best practice of teaching and learning. The researched results publishing and sharing in JEILT journal will contributes to develop methods of teaching and learning and development of the digital capability and skills. The shares of researched findings in JEILT journal will provide the mechanisms for the education reform, curriculum development, education digitalization, and language instruction and acquisition. Greatly, JEILT journal will proffers benefits to quality betterment of digital education, as such advancement of digital competencies and skills. Integration of digital teaching is a guideline to better language teaching.

Reference

Alenezi, M. (2021). Deep Dive into Digital Transformation in Higher Education Institutions. *Education Science*, 1-13, https://doi.org/10.3390 /educsci 11120770 https://www. mdpi.com/journal/education

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/

Biber, D., Johansson, S., Leech, G., Conrad, S., Finegan, E. (1999). *Longman Grammar of Spoken and Written English*. Harlow: Longman

Brumfit, C. (2004). Language and Higher Education: Two Current Challenges. *Arts and Humanities in Higher Education (AHHE)*, *3*(2), 123-124. DOI: https://doi.org/10.1177/1474022204042685

Bygate, M. (2005). Oral Second Language Abilities as Expertise. In: Johnson, K. (eds) Expertise in Second Language Learning and Teaching. Palgrave Macmillan, London. https://doi.org/10.1057/9780230523470_6

Carter, R., & McCarthy, M. (2006). *Cambridge Grammar of English*. Cambridge: Cambridge University Press.

Chhorn, T. (2025). Cognizance of applied linguistics: phonology, lexicology, morphology, and syntaxology. *Journal of Education Innovation and Language Teaching (JEILT), 1-203. DOI: https://doi.org/10.63381/jeilt.vi.14*

Davies, A., & Elder, C. (2004). Applied linguistics: Subject to discipline. In A. Davies, & C. Elder (Eds.), *The handbook of applied linguistics (pp. 1-9)*. Oxford: Basil Blackwell Publishers. doi:10.1002/9780470757000.c

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

Doughty, C. J., & Long, M. H. (2003). *A Handbook of Second Language Acquisition*. Malden: Blackwell. DOI: https://doi.org/10.1002/9780470756492

Forrester. (2016) Leading Digital Business Transformation. [Online] Forrester Research, Inc. [20Oct2017] Available: https://www.imd.org/ldbt/digital-business-transformation/

Grabe, W. and Kaplan, R.B. (1996) *Theory and Practice of Writing: An Applied Linguistic Perspective*. Longman, New York

Hang-Chuon, N. (2021). *Digital Transformation in Education.* Ministry of Education, Youth and Sports

IDC. (2015) Digital Transformation (DX): An Opportunity and an Imperative. [Online] IDCResearch. [20Oct2017] Available: https://www.idc.com/prodserv/decisionscapes/RESOURCES/ATTACHMENTS/IDC_254721_ExecBrief_Digital_Transformation.pdf

Kroll, J. F., & de Groot, A. M. B. (Eds.). (2005). *Handbook of bilingualism: Psycholinguistic approaches.* Oxford University Press.

McCarthy, M. (2008). Teaching for Understanding for Lecturers: Towards a Scholarship of Teaching and Learning. In Emerging Issues 11: *The Changing Roles and Identities of Teachers and Learners in Higher Education (pp. 101-115)*. University College Cork: NAIRTL/EDIN.

MoEYS (2019). *Educational Strategy Plan 2019-2023*. Ministry of Education, Youth and Sports

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

Parlak, B. (2017). Dijital çağda eğitim: Olanaklar ve uygulamalar üzerine bir analiz [Education in Digital Age: An analysis on opportunities and practices]. Süleyman Demirel University, Journal of Faculty of Economics and Administrative Sci*ences, V*ol. 22(15), 1741-1759

Paulo, S. (2020). A System Approach to Digital Education. UNICEF-Timor-Leste, Conference Reimagine Education: ICT & Innovation in Timor-Leste

Paunescu, C., Lepik, K. L., & Spencer, N. (2022). Social Innovation in Higher Education. Springer, Open Access: http://creativecommons.org/licenses/by/4.0/

Robinson, P., & Ellis, N. C. (2008). Conclusion: Cognitive Linguistics, Second Language Acquisition and L2 Instruction-Issues for Research. In P. Robinson & N. C. Ellis (Ed.), *Handbook of Cognitive Linguistics and Second Language Acquisition* (pp. 499-556). Routledge.

Silva, L. (2017). Challengess of Digital Transformation in Higher Education Institutions: A brief discussion. ResearchGate, Conference paper, https://www.researchgate.net/publication/330601808

Sisman, M. (2016). *Eğitim bilimlerine giriş [Introduction to educational sciences]*, Ankara: Pegem Academy Publications.

Taşkıran, A. (2017). Dijital çağda yükseköğretim [Higher education in the digital age] *ournal of open education practice and research, Vol.* (1), 96-109

Van Lier, L. (1997). Approaches to Observation in Classroom Research—Observation from an Ecological Perspective. *TESOL Quarterly, 31*, 783-787.

Winddowson, H. G. (2006). Applied linguistics and interdisciplinarity. *International Journal of Applied Linguistics (IJAL), 6*(1), 93-93. DOI: https://doi.org/10.1111/j.1473-4192.2006.00108.x

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

Article-Review History:
Received: 2025-02-11; Revised: 2025-02-28; Accepted: 2025-03-04

About the Author:
Chhorn

Journal of Education Innovation & Language Teaching (JEILT)
Peer-Reviewed Journal; Vol. 1, No. 1, pp10-20, 2025
ISSN:3080-4760 (Online); ISSN: 3080-0471 (Print)
DOI: https://doi.org/10.63381/jeilt.v1i1.24
https://jeilt.org
info@jeilt.org

Teachers' Perceptions on Digital Teaching Transformation in Cambodian Education Context

Vanna Ourn[1]*, Than Chhorn (PhD)[2]

1* Corresponding author: Air Accident Investigation Unit (AAIU), State Secretariat of Civil Aviation, ournvanna31@gmail.com
2. National Institute of Education (NIE), chhornthan1984@gmail.com

To cite this article: Ourn, V., & Chhorn, T. (2025). Teachers' perceptions on digital teaching transformation in Cambodian educational context. *Journal of Education Innovation and Language Teaching (JEILT)*, *1* (1), 10-20

Abstract

Digital teaching transformation is a process of transforming the digital to boost the quality of education and teaching and learning methods. This recent study purposes to examine the teachers' perceptions on the digital teaching transformation. Also, this research determines the effectiveness and impact of transforming digital into teaching changes in Cambodia. By addressing the in-depth results, this study employed mixed research-methods, combining of qualitative and quantitative research-methods for collecting and analyzing the data. Personal interviews and questionnaires were used to collect data. The content analysis was used to analyze the collected data of the personal interviews. The descriptive statistics analysis-method was employed to analyze the gathered data of the paper-based questionnaires. The results of this present study elaborated on the digital teaching transformation, which helped the teachers improve the methods of teaching and learning. Transforming the digital teaching helped teachers develop the digital capacity and literacy. Thus, this study benefited teachers to transform the digital into teaching and learning development, improve the quality of the digital teaching, develop the digital skills, and integrate the technology into the teaching process with digital literacy and capacity.

Keywords: *Digital teaching, Transformation, Teaching quality, Digital skills, Education*

1. Introduction

Transformation of digital teaching is a process of transforming the digital technology in the teaching and learning process. It is a potential factor for the quality development of digital teaching and learning, developed methods of digital teaching and learning, and its relationship. The Royal Government of Cambodia set up the policy of the digital transformation in education, purposing to develop the digital human recourses and digital education in Cambodia in responding to the era of the industrial revolution 4.0 (Supreme National Council, 2021).

Digital teaching was a response to teacher training reform, and it is a process of transforming education through digital technology in developing the quality of digital education, digital teaching capacity, and digital literacy

Article-Review History:
Received: 2025-02-11; Revised: 2025-02-25; Accepted: 2025-03-04

(Hangchuon, 2021). He further pointed out the digital transformation into education system with aims of reforming and developing the methods of teaching and learning to increase the human resources with the digital technological skills and streamline the process of teaching and learning quality. Digital transforming into teaching is a vital mission for educational institutions to take advantages of advancing the communicative technology, information, and digital literacy (SNC, 2021).

Integrating the digital technology is needed for the support of teaching and learning process in aiming to proffer the insight into how teaching changes through technology adoption (Dirk et al., 2021). They, in addition, argued that in the context of Industry 4.0, transforming the digital into teaching benefited the quality development of teaching and learning, created the e-teaching systems, and made the digital teaching platforms to support the teaching and learning process. The digital devices were used in the digital transformation to determine the growth and development of digital teaching (Parlak, 2017). The growth of transforming the digital into teaching is the use of digital technology in teaching process (Taşkıran, 2017). Digital competence was defined as a crucial ability for teachers to develop the teaching methods in line with the current conditions (Parlak, 2017). Digital transformation had the profound effects on teaching, regarding as a framework for the teacher training reform and quality developing of digital teaching (Balyer & Öz, 2018).

The digital literacy (e.g., internet platforms, social media, and electronic devices) is a vital skill for the 21st century education. The teachers should be the digital educators in the process of teaching and learning because the teachers need to use the digital technology, such as digital ability, literacy, and skills. This study aims at examining the teachers' perceptions on digital transformation into teaching in Cambodia. Digital teaching transformation is a hot topic, which has aroused the researcher's interest in doing research to develop the quality of digital teaching and the methods of teaching and learning. Thus, this research examines the teachers' perceptions on digital teaching transformation in Cambodian education context.

2. Literature Review

2.1The Digital Teaching Development in the 21st Century

The development of digital education, globalization, and technology influenced the changes and improvements of the digital teaching and methods of teaching and learning (Bates, 2015). Sisman (2016) highlighted the development of digital technology contributed to the out-of-school and lifelong learning. Digital transformation involved individual needs for

developing the teaching (Balyer & Öz, 2018). With studies on digital transformation in education focused on technological knowledge and digital skills, teachers needed to have digital capabilities that helped develop the teaching methods. Paulo (2020) argued that digital competence was the use of technologies, data managing, information sharing, digital transformation, and use of ICT in the process of teaching and learning. Paulo also asserted that the digital skills were the goal of teaching, which improved the teachers' digital capabilities.

Integrating the educational technology was to focus on school identification and individual factors that explained the process of transforming the education system into digital education (Dirk et al., 2021). Paunescu, Lepik, and Spencer (2022) argued that digital technology connected people to the internet and provided data and search platforms of rich data. Digital transformation focused on the use of technology in the regeneration (Forrester, 2016; IDC, 2015), and it was the process of the digital creation and re-enactment of what was once analog (OECD, 2017; Raab & Griffin-Cryan, 2011). The digital transformation of HEIs was ongoing and part of the digital process in education and affected education, such as structure, teaching and learning environment (NV, 2017). Balyer and Öz (2018) argued that digital teaching transformation was a framework for education system and the need to develop the quality of digital education and the development of teaching and learning methods.

Digital technology contributed to the development of education quality, focusing on the use of digital and internet, the use of computer technology, online experimental learning, collaborative learning, and the integration of digital technologies in teaching and learning process (Paulo, 2020). The integration of digital technology supported the teaching process, and it aimed at providing the insights into how education systems were changing through the adoption of digital technology (Dirk et al., 2021). Dirk et al. further highlighted the transformation of digital education from the media education perspective reflected and supported education in the process of transforming the digital from a performance-oriented education and media perspective. By using the existing ICT devices, higher education institutions were driven by the new ways of collaborating to create and share knowledge and resources that led to innovation and growth of digital transformation, which helped improved the education quality, especially the teaching development (Paunescu et al., 2022).

Article-Review History:
Received: 2025-02-11; Revised: 2025-02-25; Accepted: 2025-03-04

About the Author:
Ourn & Chhorn

2.2 Transforming Digital into Teaching Development

Digital transforming helped the education institutions with the digital strategy in achieving the intended goals. For this reason, the digital transformation was used as a whole and change by implementing the digital thinking and using frameworks allowed educational institutions to manage digital initiatives and approaches (Silva, 2017). Digital transforming was important in developing the digital strategies for education systems, facilitating the teaching process, controlling the use of ICT in teaching, and creating the digital infrastructure in education, such as internet access, digital tools, and digital teaching and learning environments (Paulo, 2020).

Yureva et al. (2020) argued that the vision for higher education was directly linked to the process of digitalization in line with the global trends of digital society and digital economy. With the increase of digital transformation, the educational institutions embraced the new technologies and changed teaching practices and processes. In the higher education, digital transformation was a testament to the development of the advanced and effective methods and practices in pursuing the higher education mission in terms to develop the teaching quality (Alenezi, 2021). Alenezi also elaborated on digital transformation and education that were inextricably linked as the integration of digital technology and higher education.

2.3 Importance of Transforming Digital into Teaching Change

Digital transformation was a digital strategy that helped educational institutions achieved their intended goals. Today, the higher education institutions were under pressure to provide the new and innovative digital-experiences for stakeholders (e.g., education administrators, teachers, and students). For this case, educational institutions must examine digital as a whole and change by implementing digital thinking and using the frameworks that allowed educational institutions to manage all digital initiatives and approaches in the teaching process (Silva, 2017). The digital transformation provided the importance in developing the digital teaching strategies and methods, particularly improvement of teaching quality (Paulo, 2020). Transformation of the digital technology supported the teachers' teaching process - providing teachers with rich teaching resources and being able to turn teaching and learning into the digital classroom practice.

Digital transformation embraced new technologies and changed the digital teaching practices and processes (Yureva et al., 2020). The digital transformation was employed in higher education was a testament to the development of the advanced and effective teaching methods and practices in pursuing the mission of higher educational institutions (Alenezi, 2021).

Alenezi said that the digital transformation benefited the development of teaching and learning methods and the development of teachers' digital skills (ICT soft-skills).

3. Methodology

This study used the mixed methods-research (Ivankova & Crewell, 2009), combining the qualitative (Denzin & Lincoln, 1994) and quantitative (Hsieh & Shannon, 2005) research-methods for collecting and analyzing data. This paper employed questionnaires (Graesser & McMahen, 1993) and face-to-face interviews (Masadeh, 2012) for gathering the research data. Content analysis method (Hsieh & Shannon, 2005) was used for analysis of qualitative data (e.g., face-to-face interview data), and descriptive statistics analysis (Biecek & Burzykowski, 2021) was employed for the analysis of quantitative data (e.g., data of questionnaires). This study selected 375 samples from 25 high schools in five provinces through the random sampling method. These high schools located in the provinces, such as Siem Reap, Tbong Khmum, Kampong Cham, Kampot, Takeo, and Prey Veng. These samples were selected to examine their perceptions on the effectiveness and impact of transforming digital teaching in the Cambodian education context.

Before starting the questionnaires, the researcher conducted the orientation to present the purpose and topic of research. After presenting the research topic and objectives, the researchers distributed the questionnaires to 375 participants in responding the designed questions. Answers of participants were collected for quantitative data to examine the effectiveness and impact of transforming digital teaching influenced the process of teaching. After two days of conducting the questionnaires, researchers selected 25 teacher samples for an individual interview by using the structured interviews. The answers of 25 interviewees were collected for qualitative data to determine the perceptions of transforming digital teaching in the Cambodian education context.

Questionnaires and structured interviews were analyzed for interpretation of the research results. Questionnaire analysis was used by the descriptive statistical analysis to examine the impact of transforming the digital teaching in Cambodian education context. The quantitative data were analyzed by using SPSS to examine the mean of each hypothesis. Instead, the analysis of structured interviews was used as a contextual analysis to determine the perceptions on the effectiveness of transforming the digital teaching in the Cambodian education context.

The research ethics was demonstrated by providing the personal safety to the individuals and identities of participants in this recent research. In this

sense, researcher's ethics really maintain safety of individuals to participants with quality and efficiency. Therefore, a well-conducted study required the presentation of research methods, clear data collection tools, data collection methods and appropriate data analysis methods and research ethics.

4. Findings

4.1 Teachers' Perceptions on Transforming Digital into Teaching

This highlighted the teachers' views on digital teaching transformation in the context of Cambodian education. Teachers said that digital was "E-learning software", which was used for teaching. Teachers pointed out the digital technology, which referred to "computers, smartphones, and tablets." Teachers were of the view that the digital transforming was a "technological change" in the modernization era. With the results, digital teaching referred to "teaching process, which used the technology." Teachers proved that the transformation of digital teaching was the "transforming the teaching process by the use of digital technology." Likely, the teachers argued that, the teachers might have the "digital ability in teaching." The results of this research showed that the teachers should be "proficient in digital skills of technology in the process of teaching". Accordingly, the teachers said that transforming the digital teaching provided several benefits to the teaching development, such as "facilitating the teaching process, development of the teaching methods, improvement of the teaching quality, and insurance of the teaching effectiveness.

4.2 The Effectiveness of Transforming Digital into Teaching Changes

This point indicated the views on effectiveness of transforming digital into teaching changes in the context of Cambodian education. The research results stressed that the digital transformation helped teachers know "how to use the digital technology in the teaching process." With this digital technology, the teachers understood of "the use of digital technology in the teaching process." The teachers argued that transforming the digital teaching proffered teachers the "deep understanding of and development of new teaching methods and approaches through digital technology." Teachers revealed that transforming the digital assisted teachers to have the "digital skills of technology to process teaching." The results showed that the digital transformation provided teachers with the "development of teaching ability, methods, strategies, approached, and quality."

4.3 Impact of Transforming Digital into Teaching Development

Figure 4.1 described the impact of transforming digital into the teaching development in the context of Cambodian education. The research results indicated that the transformation of digital teaching contributed to process

Journal of Education Innovation & Language Teaching (JEILT)
Peer-Reviewed Journal; Vol. 1, No. 1, pp10-20, 2025
ISSN:3080-4760 (Online); ISSN: 3080-0471 (Print)
DOI: https://doi.org/10.63381/jeilt.v1i1.24
https://jeilt.org
info@jeilt.org

digital teaching moderately (M = 1.95, SD = 0.576). Transforming the digital facilitated and helped better the teachers' digital teaching methods with the moderate(M=1.98, SD=0.557). As shown in Figure 4.1, Digital transformation helped highly develop the strategies of digital teaching (M = 2.05, SD = 0.590).

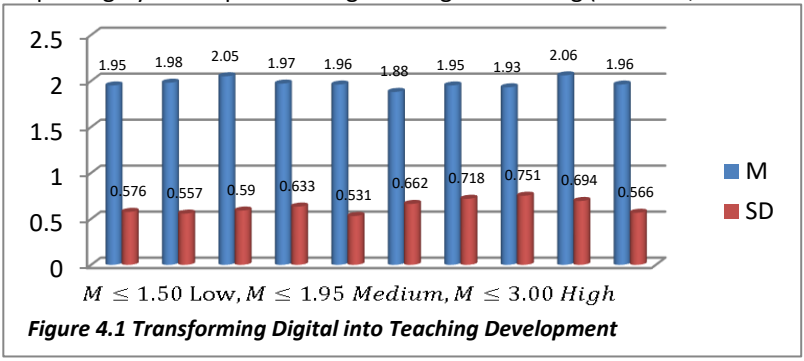


Figure 4.1 Transforming Digital into Teaching Development

With the results asserted in Figure 4.1, transforming the digital teaching contributed to the development of digital teaching approaches with medium (M = 1.97, SD = 0.633). Transforming on digital teaching provided teachers with understanding of and know how to apply digital technology into the teaching process with little advance (M = 1.96, SD = 0.531). The research results showed digital transforming helped teachers moderately modernize and integrate the digital teaching methods and approaches (M = 1.88, SD = 0.662).

Figure 4.1 proved that digital transformation contributed teachers to moderately improve the ability of digital teaching (M = 1.95, SD = 0.751). The results showed that transformation of digital technology helped advance the digital skills of teaching with the intermediate (M = 1.93, SD = 0.751). As highlighted Figure 4.1, transforming the digital highly contributed to the development of digital teaching quality in the Cambodian education context (M = 2.06, SD = 0.694).

In brief, transforming the digital benefited teachers in bettering the digital teaching methods, strategies, approaches, capacity, and quality, and it contributed to enhancement and development of digital education quality (M = 1.96, SD = 0.566).

5. Discussion

5.1 Perceived Factors on Transforming Digital into Teaching Improvement

Digital transformation is a process of technological development, in which it facilitates the process of digital teaching and learning in the 21st century. Digital teaching refers to the use of digital technology in teaching (MoEYS,

Article-Review History:
Received: 2025-02-11; Revised: 2025-02-25; Accepted: 2025-03-04

About the Author:
Ourn & Chhorn

2021) to contribute to development of the teaching and learning methods. Transforming on digital education (Hang Chuon, 2021) is education that uses the digital technology for teaching and learning process. Transformation of digital teaching is an important mission for educational institutions (Dirk et al., 2021) to improve the quality of teaching in the context of Cambodian education. Technological system, including Wiki School, E-school, Facebook, Google Meet, Zoom, Microsoft Team, and beyond, is the digital that serves digital teaching process. Digital teaching transformation helps the teachers develop the methods, strategies, and approaches of digital teaching and learning. The transformation of digital teaching is the necessary factor in the development of curricula at all levels and quality assurance of the digital teaching in Cambodia, especially the quality of digital teaching and learning. Therefore, transforming digital teaching is a digital teaching policy, which is adopted to increase digital teaching knowledge and capabilities, improve the teaching and learning quality, and reform process and approached of digital teaching.

5.2 Digital Transforming on the Quality Improvement of Digital Teaching

Digital transformation is a digital technology that is constantly evolving to contribute to development of digital human resources. Digital competence (Parlak, 2017) is a part of digital transformation that helps teachers better the teaching methods. The digital transformation has had a profound effect on digital teaching (Balyer & Öz, 2018), such as facilitating the administration, finance, human resources, teaching and learning.

Digital transformation plays an important role in the quality development of digital teaching and learning, reform of digital teaching, improvement of the digital teaching quality, and betterment of the digital teaching methods and strategies. Digital teaching transformation contributes to help teachers or educators gain a deeper understanding of digital technology and develop new approaches that are in line with the digital era of the 21st century.

Hence, digital transformation is a contribution to improvement of teaching, reform of digital teaching, and development of digital teaching quality.

5.3 Effects of Transforming Digital into Process of Teaching and Learning

Digital is a technology that has been developed for use in the jobs, such as teacher-training and educational quality reform. Digital transformation is important for teaching, particularly the digital teaching and training. Digital transformation helps develop the teachers' digital capabilities (Paulo, 2020) in facilitating the process of assessment and information and/or sharing information in the teaching and learning process. Digital is a technology with digital processing (NV, 2017) in digital teaching.

Digital transforming is transformation of digital technology that enhances and develops the digital teaching quality through integration of the digital technology and traditional teaching. Digital transformation contributes to the process of teaching and learning, such as the development of teaching and learning methods and help in improving the quality of digital teaching. Digital transformation plays a vital role in enhancing and developing the quality of digital teaching and learning, especially the quality development of digital education. Digital transformation provides education mechanisms and policies that lead to the quality development of digital teaching and education.

Thus, digital transformation proffers several benefits to the digital teaching process, including development of digital teaching methods (e.g., Distance teaching, E-teaching, Digital teaching), the development of teachers' digital ability and skills, curriculum reform, and quality development of digital teaching and education.

6. Conclusion

This study explored the digital teaching transformation in developing the teaching methods, enhancing the quality of digital teaching, and ensuring the effectiveness of digital teaching. The findings addressed that the digital teaching transformation contributed to helping teachers better the methods, capability, literacy and skills of digital teaching, providing mechanisms for the digital teaching reform, reforming the digital curriculum, improving the digital teaching quality, and ensuring the effectiveness of digital teaching. Greatly, this research benefited to digital teaching, including development of teaching and learning methods, the advance of digital competencies, and the quality development of digital teaching. Integration of digital teaching is a mechanism for the digital teaching transformation to contribute to the development of curriculum and the quality improvement of digital teaching. Digital teaching transformation is a process of transforming and developing the digital technology in the process of teaching. Therefore, the integration of digital teaching is essential for teachers with both theories and practices, especially for the educators to reform and develop the curricula, methods of digital teaching, digital competencies, and quality and effectiveness of digital teaching in the 21st century.

Reference

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

Balyer, A., & Öz, Ö. (2018). Academicians' views on digital transformation in education. *nternational 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/

Biecek, P., & Burzykowski, T. (2021). *Explanatory Model Analysis: Explore, Explain, and Examine Predictive Models.* Chapman and Hall/CRC

Denzin, N. K., & Lincoln, Y. S. (1994). Handbook of Qualitative Research. Thousand Oaks, CA: SAGE

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

Dr. Hang Chuon, N. (2021). *Digital Transformation in Education.* Ministry of Education, Youth and Sports

Forrester. (2016) Leading Digital Business Transformation. [Online] Forrester Research, Inc. [20Oct2017] Available: https://www.imd.org /ldbt/ digital-business-transformation

Graesser, A. C.,&McMahen, C. L. (1993). Anomalous information triggers questions when adults solve quantitative problems and comprehend stories. *Journal of Educational Psychology*, 85, 136–151

Hsieh, H. F., & Shannon, S. (2005). Three Approaches to Qualitative Content Analysis. *Qualitative Health Research*, 15 (9), 1277-1288. DOI: https://doi.org/10.1177/104973230 5276687

IDC. (2015) Digital Transformation (DX): An Opportunity and an Imperative. [Online] IDCResearch. [20Oct2017] Available: https://www.idc.com/ prodserv/decisionscapes /RESOURCES/ATTACHMENTS/IDC_254721_ExecBrief_Digital_Transformation.pdf

Ivankova, N. V., & Creswell, J. W. (2009). *Mixed methods. In J. Heigham & R. A. Croker (Eds.), Qualitative Research in Applied Linguistics: a Practical Introduction (135-161).* New York: Palgrave Macmillan

Masadeh, M. A. (2012). Focus Group: Reviews and Practices. *International Journal of Applied Science and Technology, 2*(10), 63-68

MoEYS (2019). *Educational Strategy Plan 2019-2023*. Ministry of Education, Youth and Sports

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

Parlak, B. (2017). Dijital çağda eğitim: Olanaklar ve uygulamalar üzerine bir analiz [Education in Digital Age: An analysis on opportunities and practices]. Süleyman Demirel University, Journal of Faculty of Economics and Administrative Sci*ences, V*ol. 22(15), 1741-1759

Paulo, S. (2020). A System Approach to Digital Education. UNICEF-Timor-Leste, Conference Reimagine Education: ICT & Innovation in Timor-Leste

Paunescu, C., Lepik, K. L., & Spencer, N. (2022). Social Innovation in Higher Education. Springer, Open Access, Open Access: http://creativecommons.org /licenses/ by/4.0/

Raab, M., & Griffin-Cryan, B. (2011) Digital Transformation of Supply Chains: Creating Value –When Digital Meets Physical: Capgemini Consulting

Silva, L. (2017). Challenges of Digital Transformation in Higher Education Institutions: A brief discussion. ResearchGate, Conference paper, https://www.researchgate.net/ publication/330601808

Sisman, M. (2016). *Eğitim bilimlerine giriş [Introduction to educational sciences]*, Ankara: Pegem Academy Publications.

Supreme National Council (2021). *Frameworks of Econumic Policy and Digital Society of Cambodia 2021-2035.* Supreme National Economic Council

Taşkıran, A. (2017). Dijital çağda yükseköğretim [Higher education in the digital age] J*ournal of open education practice and research, Vol.* (1), 96-109

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

Article-Review History:
Received: 2025-02-11; Revised: 2025-02-25; Accepted: 2025-03-04

About the Author:
Ourn & Chhorn

Journal of Education Innovation & Language Teaching (JEILT)
Peer-Reviewed Journal; Vol. 1, No. 1, pp21-33, 2025
ISSN:3080-4760 (Online); ISSN: 3080-0471 (Print)
DOI: https://doi.org/10.63381/jeilt.v1i1.26
https://jeilt.org
info@jeilt.org

Transforming on Digital Education: Perceptions of Teachers and Students at High School, in Cambodia

Than Chhorn[1]*, Linn Chau[2], Saroeun Mao[3],
Chanthan Loch[4], Sreybandith Chhouk[5]

1* Corresponding author, National Institute of Education, chhornthan1984@gmail.com
2. National Institute of Education, Linnc298@gmail.com
3. National Institute of Education, mao.saroeun@nie.edu.kh
4. National Institute of Education, loch.chanthan@nie.edu.kh
5 National Institute of Education, chhouk_bandith@yahoo.com

To cite this article: Chhorn, T. Chau, Linn., Maon, S., Loch, C., & Chhouk, S. (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

Abstract

Transforming on digital education was a process of digital transformation in the education system, regarding as a way to improve education quality and teaching and learning methods in responding to Industrial Revolution 4.0. This study aimed at examining the perceptions and challenges of teachers and students on the transformation of digital education. This research also explored the impact of digital education transformation on the process of teaching and learning at Cambodian high schools. In depth-presentations of research results, the study used mixed methods-research for data collection and analysis. The collected data were analyzed by using the content analysis method for qualitative data analysis and descriptive statistics method for quantitative data analysis. The results showed that transformation of digital education proffered the importance to improving the education quality and reforming education. Transforming on digital education helps teachers and students develop their digital skills. Thus, this study provided many benefits to the digital education, including enhancing the quality of digital education, improving teaching and learning methods, developing the digital skills of teachers and students, and integrating digital technology with traditional teaching and learning

Keywords: *Digital Transforming; Education Quality; Digital Education; Digital; Transformation*

1. Introduction

Digital education is the education that uses the digital technology in teaching and learning process. Royal Government of Cambodia established a policy of digital transformation, aiming at developing Cambodia in responding to the Industrial Revolution 4.0 (Royal Government of Cambodia [RGC], 2021). At the same time, the education policy focused on the digital transformation in education was reformed to develop methods of teaching and learning and to improve the quality of education (Ministry of Education, Youth and Sports [MoEYS], 2019). Transforming on digital education was the transformation of education by using the digital systems to effectively develop quality of education. The digital transformation in Education was set with the aim of

reforming and developing the teaching and learning methods by using the technology to develop the human resources and streamline teaching and learning process (Hang-Chuon, 2021). Digital transformation was to take the advantages of advancing the communication technology, information, and digital to increase the productivity and make Cambodia's socio-economics be developed with a higher level (RGC, 2021).

Transforming on the digital education was an important mission for all educational institutions. Integration of the digital technologies was very important for the communication, management, and support for teaching and learning (Dirk et al., 2021). Transformation of digital education aims to provide the insight into how education changes through the adoption of digital technology. On the other hand, the development of digital learning must be based on the needs of students. Digital education was a response to era of technologies (digital transformation) to reform training and schools, especially to increase the human resources with digital technological skills (Hang Chuon, 2021). In the context of Industry 4.0, digital education was crucial for transforming Cambodia into a country with a digital economy. The digital transformation in education has brought several benefits to the process of teachers' teaching and students' learning. The digital technology and the social media systems included Computer, Smart Phone, Facebook, YouTube, Telegram, Google, Web-apps, and Microsoft Team, in which they created e-learning systems and digital platforms to support the students' learning process. The learning environment in the digital era was a key factor in the digital transformation in education.

In transformation of digital education, digital literacy was an essential skill for teaching and learning in the society of 21st century, which used the digital technology (Internet platforms, social media, and electronic devices). Transformation of digital education was the key factor in improving the education quality and education reform to strengthen the effective school management, develop teaching and learning methods, and promote STEM education. Transformation of digital education contributed to development of digital education and the relationship of digital education in schools. In the digital transformation in education, the teachers played a vital role in education sectors and the teaching and learning process because the teachers needed to use digital technology (information and communication technology). With the development of information and communication technology, digital devices were used in digital transformation to determine the growth and development of education (Parlak, 2017). Transforming the digital in education was the result of growth of the use of technology in the

teaching and learning process (Taşkıran, 2017). In digital transformation in education, digital competence was an important ability for the teachers and students to develop teaching and learning methods in line with the current conditions (Parlak, 2017). Digital transformation had a profound effect on the education, including structure and learning environment (Balyer & Öz, 2018). The transformation of digital education was the general framework for the education system, which was the need to develop the quality of the digital education (digital transformation on the development of teaching and learning methods).

This resent study aims to examine and understand the perceptions and challenges of teachers and students on the transformation of digital education at the high schools in Cambodia. This study focuses on the impact of the transformation of digital education on the process of teaching and learning. The transformation of the digital education is a research topic that has aroused researchers to do research in developing the high quality, effective, and efficient teaching and learning methods at the high schools. Thus, this study explores transformation of digital education: perceptions of teachers and students at the high schools in Cambodia.

2. Literature Review

The development in information era, impact of globalization, and technology referred to the necessity of changes and improvements in education system, methods, and process of teaching and learning (Bates, 2015). Sisman (2016) argued that the development of information and communication technology contributed to the out-of-school and lifelong learning. Digital transformation could be achieved by involving all sections of society and individual needs (Balyer & Öz, 2018). Individuals who saw the digital process as making personal work or communication with state more comfortable and easier to communicate with institutions would be part of the digital transformation process. Digital education referred to the combination of the technological knowledge and digital skills, which was an important part for teachers and students to develop teaching and learning. In this sense, teachers needed to have digital capabilities that helped them develop the teaching methods in responding to education in the Industrial Revolution 4.0.

According to Paulo (2020), digital competence was the use, evaluation, and information and data managing, information sharing and communication, digital transformation, and use of ICT in the teaching and learning process. Within the framework of digital education, the digital skills were the goal of teaching and learning that improved the digital capabilities of teachers and students. Integration of the educational technology focused on the school

identification and individual factors that explained process of transforming the education system into digital education (Dirk et al., 2021). In the 21st century, innovation and digital technology connected people to the Internet and provided rich and open data and search platforms of rich data (Paunescu, Lepik & Spencer, 2022). Digital transformation referred to the use of digital technology in the different contexts. Accordingly, the digital transformation focused on use of technology in regeneration (Forrester, 2016; IDC, 2015). Digital transformation was the process of digital creation and re-enactment of what was once analog (OECD, 2017; Raab & Griffin-Cryan, 2011). Digital transformation of HEIs was ongoing and part of the digital process in education (NV, 2017).

According to the stud confirmed by Balyer and Öz (2018), digital transformation affected the education (structure and learning environment), being a framework for the education system and need to develop quality of the digital education. Higher education institutions (HEIs) had been using emerging technologies as a means of improving educational practices and adapting to a technology-based society. Digital transformation on education was the key to the development of teaching and learning methods (Paulo, 2020). The digital technology contributed to the development of quality education, focusing on the use of digital systems and Internet, the use of computer technology, online experimental learning, collaborative learning, and the integration of the digital technologies in teaching and learning.

The integration of the digital technology was an important mission for the educational institutions in Cambodia. Digital transformation aimed at giving the insights into how the education systems were changing through the adoption of digital technology (Dirk, et al., 2021). The digital transformation of education from media education perspective reflected and supported education in process of digital transformation from a performance-oriented education and media perspective. In order to use the existing ICT devices more effectively, sustainably and accurately, higher education institutions were driven by new ways of collaborating to create and share knowledge and resources that led to innovation and growth (Paunescu, et al., 2022).

Digital transformation of education was a digital strategy that helped the educational institutions achieved intended goals. Today, higher education institutions were under pressure to provide new and innovative digital-experiences for stakeholders (e.g., education administrators, teachers, and students). For this reason, educational institutions must begin to examine digital as a whole and change by implementing digital thinking and using frameworks that allowed the educational institutions to manage all digital

initiatives and approaches (Silva, 2017). Digital transformation of education provided importance in the development of digital strategies for education systems, control over the use of ICT in education, and the creation of digital infrastructure in education (Internet access, digital tools, and digital learning environments) (Paulo, 2020). Digital technology was the support to students' learning process - providing students with the rich learning resources and being able to turn teaching and learning into classroom practice.

Currently, vision for higher education was directly linked to the process of digitalization in line with the global trends of digital society and the digital economy (Yurev et al., 2020). In the digital transformation, the educational institutions had been embracing new technologies and changing educational practices and processes. Digital transformation in higher education was a testament to development of more advanced and effective methods and practices in pursuing the mission of the higher education (Alenezi, 2021). Alenezi said that the digital transformation and education were inextricably linked as the integration of digital technology and higher education. The synthesized results of previous studies showed that digital transformation on education provided several benefits to the development of the teaching and learning methods, enhancement of digital education, and development of digital skills of teachers and students (ICT soft skills).

3. Methodology

This study employed the mixed research-methods (Ivankova & Crewell, 2009; Than, 2021), combing the qualitative research-method (Denzin & Lincoln, 1994) and quantitative research-method (Lennon, 1990; Hsieh & Shannon, 2005) for data collection and analysis. This research used the data collection tools, such as face-to-face interviews (Masadeh, 2012) and questionnaires (Graesser & McMahen, 1993). Data analysis methods included content analysis method (Hsieh & Shannon, 2005) for the qualitative analysis and descriptive statistics analysis (Biecek & Burzykowski, 2021) for quantitative analysis. This study selected 385 samples (150 teachers and 235 students) of 10,000 population size from 20 high schools in five provinces, for questionnaires. 30 interview-samples among 385 samples were selected. These samples were selected by using random-sampling methods. The selected students were the grade 10, 11 and 12 students from High Schools. These high schools included Sokha Phally, Kampong Speu, Hun Sen Chambok, Depok, Techo Hun Sen Tbong Khmum, Ponhea Krek, Heng Samrin Anlong Chrey, Preah Sihanoukville, Hun Sen Kampong Cham, Samdech Chuon Nath, Hun Sen Skon, Cambodia-Japan Kampot Krong, Preah Norodom Ranaridth, Chhouk, Trasekkaung, Hun Sen Bati, Chea Sim Takeo, Samdech Ov, Chheu

Teal, and Krong Preah Sihanouk. These high schools located in the provinces, such as Kampong Speu, Tbong Khmum, Kampong Cham, Kampot, Takeo, and Preah Sihanouk. These participants were the required samples selected from 20 high schools of the five provinces to determine perceptions and challenges of teachers and students on digital education transformation at high school in Cambodia. Questionnaires and interviews were analyzed for the interpretation of the research results. Questionnaire analysis was used by descriptive statistical analysis to examine the impact of transforming on digital education on the process of teaching and learning at the high school in Cambodia. Quantitative data were analyzed by using SPSS to investigate the mean of each hypothesis. Instead, analysis of interviews was used as a contextual analysis to determine the perceptions of teachers and students have for transforming on digital education and challenges of teachers and students on transforming on digital education at high school in Cambodia.

4. Findings

Perceptions of Teachers and Students on Digital Education Transformation

Teachers said that digital was an electronic program that was used for teaching. The teachers pointed out that the digital technology referred to "computers, smartphones, and tablets." Teachers were of the view that the digital transformation was a technological change in modern era. According to the research results shown, digital education referred to education using technology. Teachers pointed out that the evolution of the digital education was the transformation of the education system by using digital technology. The teachers should have sufficient digital skills in teaching. The results of the research showed that the teachers should be proficient in digital technology in the process of teaching. The teachers said that transforming on digital education provided benefits, including the ease of teaching, the development of teaching methods, the improvement of teaching quality, and the insurance of teaching effectiveness.

The students pointed out that digital referred to the electronics used for study. Students explained that digital technology included "telephones, computers, and telescopes." Accordingly, the digital transformation referred to the changing process of technology used in education process, especially the studies. The students indicated that digital education was the use of digital technology in education. Transforming on the digital education was a process of educational transformation by using digital technology, especially the use of the digital technology in education. The results showed that the students should have sufficient digital skills to the study. Students should be proficient in the digital technology on the process of learning. According to

the research results shown, transformation on digital education had the significant impact on the process of students' learning, including increasing the ease of learning, developing the learning methods, improving the quality of education, and ensuring the effectiveness of the study.

Challenges of Teachers and Students on Digital Education Transformation

The challenges, in which the teachers faced in the transforming on digital education at the high school. The results stressed that teachers did not know how to use technology in process of teaching. With this digital technology, the teachers were troubled with challenges, such as a lack of understanding of the use of the digital technology in the educational process. Accordingly, the teachers had problems with teaching methods in transforming on digital education, including a lack of understanding of new approaches by using digital technology. Teachers did not have the skills of digital technology in the teaching process. The results asserted that the teachers were doubted with the challenges in using the digital technology to develop teaching quality, such as the lack of digital knowledge on the development of teaching quality. The findings showed that teachers did not have sufficient digital skills in teaching.

The challenges, in which students faced in transforming on digital education at high school. The findings highlighted that the students were troubled with challenges in using digital technology for learning, such as a lack of using the technology in learning process. The students had problems with technology knowledge, including a lack of understanding of the use of digital technology in the education. The students did not have a deep understanding of new learning methods by using the digital technology. The students did not have the specific skills of digital technology for the studies. The results showed that students had a lack of digital knowledge and did not have the ability to develop the learning quality.

Impact of Transforming on Digital Education on Teaching and Learning

Table 4.1 described the impact of transforming on digital education on the teaching process at the high school. The research results indicated that transformation of digital education contributed to the teaching process with the intermediate (M = 1.95, SD = 0.576). Digital education facilitated the process of teachers' teaching with the high (M = 1.98, SD = 0.557). Digital education helped improve the quality of education in Cambodia (M = 2.05, SD = 0.590). Accordance to the results asserted in Table 4.1, transforming on digital education contributed to the development of the teaching methods (M = 1.97, SD = 0.633). Transforming on digital education facilitated the teaching with advance (M = 1.96, SD = 0.531). The results of the research

showed that transforming on digital education helped teachers develop digital skills for teaching with the intermediate (M = 1.88, SD = 0.662). Table 4.1 proved that STEM subjects contributed to teaching of digital education with the intermediate (M = 1.95, SD = 0.751). The results of the research showed that digital technology helped improve the teaching quality with the intermediate (M = 1.93, SD = 0.751). According to the results stressed in Table 4.1, transforming on digital education contributed to the development of the education quality in Cambodia, with the high (M = 2.06, SD = 0.694). In brief, transforming on digital education benefited teachers in developing the teaching methods, teaching quality, and teachers' digital capabilities, and it contributed to the promotion and development of education quality with the high (M = 1.96, SD = 0.566).

Table 4.2 highlighted the impact of transforming on digital education on high school students' learning. Transforming on digital education contributed to the students' learning process with the high (M = 2.03, SD = 0.913). The findings showed that digital education helped improve the students' learning process with the rapid (M = 2.07, SD = 0.693). Students explained that digital education helped improve the education quality in Cambodia with the high (M = 2.14, SD = 0.663). According to results shown in Table 4.2, transforming on digital education contributed to the development of the student' learning methods with the advance (M = 2.18, SD = 0.696). The transformation of digital education enabled the students to study with the higher (M = 2.09, SD = 0.684). The transformation of digital education helped students develop the digital skills of learning process with the rapid (M = 2.02, SD = 0.671). Table 4.2 argued that STEM subjects contributed to the study of digital education with the high (M = 2.04, SD = 0.676). In the context of transforming on digital education, digital technology helped students develop the education quality with the best (M = 2.10, SD = 0.638). The results presented that the transformation of digital education contributed to the development of education quality in Cambodia, with the high (M = 2.17, SD = 0.712). The results revealed that transformation of digital education provided benefits to students in developing the learning methods, learning quality, and digital abilities, and it contributed to the promotion and development of education quality with the rapid (M = 1). .96, SD = 0.566).

5. Discussion

Perspectives on Transforming on Digital Education

The results of this research have shown that digital technology is a process of technological development, in which it facilitates teaching and learning process in the 21st century. Digital education refers to the use of digital

technology in education (MoEYS, 2021) to contribute to the development of the teaching and learning methods. Transforming on digital education (Hang Chuon, 2021) is the education that uses the digital technology for the teaching and learning process. The transformation of digital education is an important mission for educational institutions (Dirk et al., 2021) to reform the curriculum and improve quality of education in Cambodia. Technological system, including Wiki School, E-school, Facebook, Google Meet, Zoom is the digital that serves education. Digital technology helps leaders, teachers, and students develop the management and methods of teaching and learning, in particular, the administration, time, and education. Transformation of digital education is the necessary factor in the development of curricula at all levels and quality assurance of education in Cambodia, especially quality of teaching and learning. Therefore, transforming on digital education is an education policy, which is adopted to the increase digital knowledge and capabilities, improve quality of teaching and learning, and reform education.

Transforming on the Improvement of Education Quality

According to the above-presented research results, digital transformation is a technology that is constantly evolving to contribute to the development of the human resources and nation. Digital competence (Parlak, 2017) is a part of the digital transformation that helps teachers and students develop the teaching and learning methods. Digital transformation has had a profound effect on education (Balyer & Öz, 2018), such as facilitating administration, finance, human resources, teaching and learning. The digital transformation plays an important role in the development of the quality of teaching and learning, the reform of education, the improvement of education quality, and development of human resources. Digital transformation contributes to helping teachers and students, especially depth-understanding of the digital technology and develop new approaches that are in line with the digital era of the 21st century. Thus, the digital transformation is a contribution to improvement of education, the reform of education, and the development of the education quality.

Effects of Transforming on Digital Education into Teaching and Learning

The above-addressed results of research reveal that digital is a technology that has been developed for use in jobs, such as administrative management, finance, and human resources, training and management of human resource, and educational quality reform. Digital transformation is important for training, particularly education. Digital transformation helps develop the digital capabilities of teachers and students (Paulo, 2020) in facilitating the process of assessment and information or data management and sharing

information in the teaching and learning process. Digital is a technology with digital processing (NV, 2017) in digital education. Digital transforming is transformation of digital technology that enhances and develops the education quality through integration of digital technology and traditional education. Digital transformation contributes to the process of teaching and learning, such as the development of teaching and learning methods and the help in improving the quality of digital education. Digital transformation plays an important role in promoting and developing the quality of teaching and learning, especially the quality development of digital education. Digital transformation provides education mechanisms and policies that lead to the development of quality of digital education. Thus, digital transformation benefits to the digital education process, including the development of the teaching and learning methods (e.g., Distance teaching and learning, E-teaching and learning, Digital teaching and learning), the development of digital competencies and skills of teachers and students, curriculum reform, and quality development of the digital education.

6. Conclusion

Transformation of digital education helped developing methods of teaching and learning, improving quality of digital education, and ensuring the quality and effectiveness of digital education. This study determined the views of the teachers and students on the digital education transformation, identified challenges of teachers and students on transforming on digital education, and examined the impact of digital education transformation that influenced the teaching and learning process at high school in Cambodia. The findings addressed that transformation of digital education contributed to develop teaching and learning methods, and digital capability and skills, to provide mechanisms for education reform, to reform the curriculum, improve the digital education quality, and to ensure the effectiveness of digital education. Importantly, this study proffered benefits to the digital education, as such advance of the digital competencies and development of digital education quality. Integration of digital education is a mechanism for bettering the education systems. Transformation of digital education to develop teaching and learning methods, enhance and improve the quality of digital education, capabilities, and digital skills, and ensure effectiveness of digital education.

Reference

Alenezi, M. (2021). Deep Dive into Digital Transformation in Higher Education Institutions. *Education Science*, 1-13, https://doi.org/10.3390 /educsci 11120770 https://www. mdpi.com/journal/education

Balyer, A., & Öz, Ö. (2018). Academicians' views on digital transformation in education. *nternational 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/

Biecek, P., & Burzykowski, T. (2021). *Explanatory Model Analysis: Explore, Explain, and Examine Predictive Models.* Chapman and Hall/CRC

Denzin, N. K., & Lincoln, Y. S. (1994). Handbook of Qualitative Research. Thousand Oaks, CA: SAGE

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

Forrester. (2016) Leading Digital Business Transformation. [Online] Forrester Research, Inc. [20Oct2017] Available: https://www.imd.org/ ldbt/digital-business-transformation/

Graesser, A. C., &McMahen, C. L. (1993). Anomalous information triggers questions when adults solve quantitative problems and comprehend stories. *Journal of Educational Psychology*, 85, 136–151

Hang-Chuon, N. (2021). *Digital Transformation in Education.* Ministry of Education, Youth and Sports

Hsieh, H. F., & Shannon, S. (2005). Three Approaches to Qualitative Content Analysis. *Qualitative Health Research*, 15 (9), 1277-1288. DOI: 10.1177/ 104973230 5276687

IDC. (2015) Digital Transformation (DX): An Opportunity and an Imperative. [Online] IDCResearch. [20Oct2017] Available: https://www.idc.com/ prodserv/decisionscapes/RESOURCES/ATTACHMENTS/IDC_254721_ ExecBrief_Digital_Transformation.pdf

Ivankova, N. V., & Creswell, J. W. (2009). *Mixed methods. In J. Heigham & R. A. Croker (Eds.), Qualitative Research in Applied Linguistics: a Practical Introduction (135-161).* New York: Palgrave Macmillan

Masadeh, M. A. (2012). Focus Group: Reviews and Practices. *International Journal of Applied Science and Technology, 2*(10), 63-68

MoEYS (2019). *Educational Strategy Plan 2019-2023*. Ministry of Education, Youth and Sports

Lennon, P. (1990). Investigating fluency in EFL: A Quantitative Approach. *Language Learning, 40*(3), 387 - 417

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

Parlak, B. (2017). Dijital çağda eğitim: Olanaklar ve uygulamalar üzerine bir analiz [Education in Digital Age: An analysis on opportunities and practices]. Süleyman Demirel University, Journal of Faculty of Economics and Administrative Scie*nces, V*ol. 22(15), 1741-1759

Paulo, S. (2020). A System Approach to Digital Education. UNICEF-Timor-Leste, Conference Reimagine Education: ICT & Innovation in Timor-Leste

Paunescu, C., Lepik, K. L., & Spencer, N. (2022(. Social Innovation in Higher Education. Springer, Open Access, Open Access: http://creativecommons.org /licenses/ by/4.0/

Raab, M., & Griffin-Cryan, B. (2011) Digital Transformation of Supply Chains: Creating Value –When Digital Meets Physical: Capgemini Consulting

Royal Government of Cmabodia (2021). *Frameworks of Econumic Policy and Digital Society of Cambodia 2021-2035.* Supreme National Economic Council

Silva, L. (2017). Challenges of Digital Transformation in Higher Education Institutions: A brief discussion. ResearchGate, Conference paper, https://www.researchgate.net/ publication/330601808

Sisman, M. (2016). *Eğitim bilimlerine giriş [Introduction to educational sciences]*, Ankara: Pegem Academy Publications.

Taşkıran, A. (2017). Dijital çağda yükseköğretim [Higher education in the digital age] *ournal of open education practice and research, Vol.* (1), 96-109

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: 10.13189/ujer.2020. 082232

Journal of Education Innovation & Language Teaching (JEILT)
Peer-Reviewed Journal; Vol. 1, No. 1, pp21-33, 2025
ISSN:3080-4760 (Online); ISSN: 3080-0471 (Print)
DOI: https://doi.org/10.63381/jeilt.v1i1.26
https://jeilt.org
info@jeilt.org

Appendixes

Table4.1 digital education transformation on the process of teaching

	Items	N	M	SD
1	contribute to teaching process	150	1.95	0.576
2	help advance the teaching process …	150	1.98	0.557
3	improve quality of digital education	150	2.05	0.590
4	develop the teaching methods.	150	1.97	0.633
5	Provide digital teaching platforms	150	1.96	0.531
6	better digital capabilities	150	1.88	0.662
7	contribute to STEM teaching	150	1.95	0.718
8	helps improve the quality of teaching	150	1.93	0.751
9	contribute to develop education quality	150	2.06	0.694
		Total	**1.96**	**0.566**

$M \leq 1.50$ Low, $M \leq 1.95$ $Medium, M \leq 3.00$ $High$

Table4.2 digital education transformation on learning process

	Items	N	M	SD
1	contribute to learning process	235	2.03	0.713
2	help better the learning process	235	2.07	0.693
3	improve the education quality	235	2.14	0.663
4	develop the teaching methods.	235	2.18	0.696
5	Provide digital teaching platforms	235	2.09	0.684
6	better digital capability and skills	235	2.02	0.671
7	contribute to STEM learning	235	2.04	0.676
8	helps improve the quality of learning	235	2.10	0.638
9	contribute to develop the digital education	235	2.17	0.712
		Total	**2.02**	**0.713**

$M \leq 1.50$ Low, $M \leq 1.95$ $Medium, M \leq 3.00$ $High$

Article-Review History:
Received: 2025-02-11; Revised: 2025-02-28; Accepted: 2025-03-04

Journal of Education Innovation & Language Teaching (JEILT)
Peer-Reviewed Journal; Vol. 1, No. 1, pp34-52, 2025
ISSN:3080-4760 (Online); ISSN: 3080-0471 (Print)
DOI: https://doi.org/10.63381/jeilt.v1i1.29
https://jeilt.org
info@jeilt.org

Evolution of Curriculum Standards: A Comprehensive Review of Historical Development

Sereyrath Em[1]*, Buratin Khampirat[2]

1*Corresponding author: Suranaree University of Technology, Nakhon Ratchasima, 30000, Thailand, ORCiD: https://orcid.org/0000-0002-6803-195X
2. Suranaree University of Technology, Nakhon Ratchasima, 30000, Thailand, ORCiD: https://orcid.org/0000-0002-0725-3305

To cite this article: Em, S., & Khampirat, B. (2025). Evolution of curriculum standards: A comprehensive review of historical development. *Journal of Education Innovation and Language Teaching (JEILT)*, *1*(1), 34-52

Abstract

This article provides a comprehensive analysis of curriculum standards in higher education, employing a theoretical taxonomy to evaluate key empirical research over the past thirty years. It meticulously examines the evolution of curricular standards, outlining their influence on curriculum development, academic standards, quality assurance, and the creation and control of curriculum. The article outlines the historical factors that have influenced curricular standards, highlighting the impact of economic, political, and social issues. It points out problems and gaps in previous research, mainly when it comes to the historical development of curriculum assessment, and gives a full assessment of earlier studies. A significant issue is the prevalence of economic and political ideas. These things might get in the way of the learning goals of curriculum standards and push a test-based approach that goes against basic educational principles. The essay analyzes the future of curricular standards, highlighting issues such as the impact of technology on assessments, the changing role of educators, and the need for new curriculum design. Evaluation procedures view technology as a revolutionary influence. This process includes computer-adaptive testing, automated scoring, and ensuring alignment with evolving content standards. The essay then calls for more communication between academics, politicians, and teachers in order to set useful, fact-based standards that align local government with the need for educational reform. This underscores the need to address unsolved disagreements and research deficiencies in the discourse surrounding curricular standards.

Keywords: *Curriculum standard, Adaptation, Connection, Mutability, Pedagogization, Education*

Journal of Education Innovation & Language Teaching (JEILT)
Peer-Reviewed Journal; Vol. 1, No. 1, pp34-52, 2025
ISSN:3080-4760 (Online); ISSN: 3080-0471 (Print)
DOI: https://doi.org/10.63381/jeilt.v1i1.29
https://jeilt.org
info@jeilt.org

1. Introduction

The present article presents a theoretically informed taxonomy of the curriculum standards literature and, using this taxonomy undertakes a systematic review of several empirical studies of curriculum standards in higher education settings. Drawing on the last 30 years of research literature, the main literature on curriculum standards critically was mapped and reviewed. By doing so, curriculum standards cross streams of curriculum research, including curriculum development, curriculum and society, academic standards, quality assurance demonstrated, and ways that curriculum was constructed and controlled. The article compares and contrasts findings, considers gaps and weaknesses in the literature, and ends with discussions of patterns emerging. In the last century, scholars have documented development and change in practices designed to control and assess the curriculum taught in the system of higher education (Tasdemir & Gazo, 2020). Historical developments have largely been missing from previous attempts to systematically review the assessment of the college and university-taught curriculum (Borokhovski et al., 2020). Building on this historical context, the article delves into the foundational forces that have shaped curriculum standards, highlighting key influences such as political, economic, and social factors that have driven curriculum development over time.

2. Conceptual Framework of Literature

2.1 Historical Foundations of Curriculum Standards

Numerous historical forces have influenced the development of curriculum standards (Li & Chen, 2017). The contemporary focus on curriculum predates concept itself by a minimum of 300 years (Paraskeva, 2021). Consequently, the majority of early curriculum standards just represent the scope and sequencing of subject matter domains (McLachlan et al., 2018). The concept of the common school primarily denotes the standardization of educational expectations via a uniform, validated curriculum for all, mirroring the historical focus on universal access to education (Roehrig et al., 2021). During that period, Simanjuntak et al. (2022) identified three primary external influences that significantly contributed to the growth of the curriculum. A significant factor is the swift expansion of newly established Western states in the United States, which necessitated a common educational system to unify the diverse populations of these states while still affirming their distinctiveness (Jakovljevic et al., 2021). The progress and increasing affluence of the United States compelled companies to delineate

Article-Review History:
Received: 2025-02-20; Revised: 2025-003-03; Accepted: 2025-03-06
About the Author:
Em & Khampirat

Journal of Education Innovation & Language Teaching (JEILT)
Peer-Reviewed Journal; Vol. 1, No. 1, pp34-52, 2025
ISSN:3080-4760 (Online); ISSN: 3080-0471 (Print)
DOI: https://doi.org/10.63381/jeilt.v1i1.29
https://jeilt.org
info@jeilt.org

job experience primarily in terms of abilities, knowledge, and attitudes (Toffler, 2022).

Economic and political forces have consistently been the primary determinants of the basic curricular standards (Schofer et al., 2021; Zapp & Lerch, 2020). To achieve enduring success, the diverse range of individual educational demands must be seamlessly integrated (Felten & Lambert, 2020). During this period, they established a foundational curriculum, Khalil et al. (2020) noted that as available options begin to diverge, mass society regulates itself into a distinct array of behaviors, with the property-owning middle class distinguishing itself from its impoverished non-owning counterparts. To address such wants and perpetuate the separation process, property economies, and societies undergo further regulation. The following table delineates the identified stages of the progression of curriculum standards, based on an analysis of several papers concerning curriculum and related disciplines.

Table 1 Perceived Stages of Evolution of Curriculum Standards

No.	Periods	Brief Explanation
1	Ancient Education Systems	Early educational systems were based on oral traditions and apprenticeships, focusing on basic literacy and trade skills.
2	Medieval and Renaissance Education	Education focused on classical texts and religious instruction, with an emphasis on grammar, rhetoric, and logic.
3	The Enlightenment and Industrial Revolution	Rise of formalized curricula emphasizing science, mathematics, and critical thinking, driven by societal change and industrialization.
4	Modern Education Systems	Standardized curricula emerge, with a focus on broad education for the masses, including compulsory schooling.
5	The Rise of National Education Systems	Governments take an active role in defining national educational curricula, emphasizing uniformity and state-controlled education.

Article-Review History:
Received: 2025-02-20; Revised: 2025-003-03; Accepted: 2025-03-06
About the Author:
Em & Khampirat

6	The Impact of World Wars and Globalization	Curriculum development was influenced by global conflicts and international movements, focusing on citizenship, democracy, and global cooperation.
7	Emergence of Curriculum Standards	Formalization of curriculum standards to ensure consistency and quality, marking a shift toward measurable educational outcomes.
8	Early 20th Century Developments	Development of standardized testing and the integration of curriculum standards with assessment practices, focusing on efficiency.
9	Mid to Late 20th Century Innovations	Introduction of progressive educational theories, technology integration, and diversification of curriculum standards to cater to different learning needs.
10	Contemporary Curriculum Standards	Current trends emphasize competency-based education, standardized assessments, and integration of global educational frameworks.
11	Future Directions in Curriculum Standards	Exploration of flexible, personalized curricula, driven by technology, and addressing global challenges like equity and sustainability.

Table 1 delineates the principal phases in the development of curricular standards, commencing with ancient systems centered on oral traditions and apprenticeships, progressing to the emergence of national education systems, and the impact of global occurrences such as the World Wars. It chronicles the establishment of curricular standards in the 20th century, highlighting standardized assessment, curriculum efficacy, and innovation. Current standards emphasize competency-based education, with future trends indicating a shift toward tailored curricula and technology-driven reforms to tackle global concerns. Each phase illustrates changes in educational priorities influenced by societal, political, and technical factors.

A. Ancient Education Systems

Martinez (2022) noted that in several ancient cultures, curriculum standards featured a core curriculum, the higher levels of which were studied by very few students. This core curriculum was a complex body of knowledge

concentrated on reading and writing, with the noted exception of oral training in ancient Sparta. According to Kim (2020), each curriculum was designed to foster the values and central ideas of the culture, a goal compatible with such limited participation. Rapanta et al. (2021) also revealed that the Hebrew system sought to develop wisdom and faith, while the Spartan curriculum sought the military virtues of power and discipline, and the students' limitations were suited to the development of these needs. The Greek program, the basis for much of Western civilization's curriculum, taught reading, writing, speaking, and listening to prepare the mind for an ethical, intelligent, and productive life as a citizen. Nokes (2022) further noticed that these values were pursued in a system that minimized occupational and commercial knowledge while striving to identify the abilities of outstanding students and cultivate the discovery of truth, intelligence, emotion, and imagination. In sharp contrast to the pattern introduced in Late Antiquity, the ancient Roman curriculum espoused certain traditional virtues while focusing on the acquisition of practical abilities such as reading, writing, mathematics, and public speaking.

b. Medieval and Renaissance Education

In the Western academic tradition, medieval universities usually included two different curricula or faculties (Ruano-Borbalan, 2022). The lower faculty (the faculty of arts) was preparatory and taught the seven liberal 'arts' or subjects that were drawn from the church fathers and which were vital for the effective training of the intellect. Many techniques of scholastic disputation were aimed at developing the ability to articulate reasoning for the discussion of church articles using techniques for disputation and rhetoric, according to Che et al. (2023). It has been highlighted that since the 'nominalist threat,' realist philosophers tried to demonstrate a new connection between parts of speech and theological meaning. The higher faculty educated the clergy with ten years of theological studies (in which moral philosophy was featured), as noted by Cadge et al. (2020). Shaheen et al. (2021) and Thalén and Carlsson (2020) noted that there was no tension between including secular subjects in the preparatory curriculum and providing higher education in philosophy and moral theology in the three years of magisterial studies toward the priesthood, as it was consistent with the Christian worldview to consider the system as a way to summarize the elements of a Christian doctrine of reason, which was close to the Via Hebraeica.

Journal of Education Innovation & Language Teaching (JEILT)
Peer-Reviewed Journal; Vol. 1, No. 1, pp34-52, 2025
ISSN:3080-4760 (Online); ISSN: 3080-0471 (Print)
DOI: https://doi.org/10.63381/jeilt.v1i1.29
https://jeilt.org
info@jeilt.org

c. The Enlightenment and Industrial Revolution

During this period, educational programs prioritized the liberal arts, classical studies, rhetoric, and logic. The European curriculum mostly retained the Greek emphasis on the trivium and quadrivium, albeit with the integration of a more religious context (Flinders & Thornton, 2021). The curriculum for early American common schools post-Revolutionary War was a streamlined extension of the English model, encompassing language, rhetoric, dialectic, mathematics, geometry, music, and astronomy (Abbott, 2020). By the mid-19th century, there was a push for the incorporation of vocational education in schools, proposing that an effective educational institution should integrate fundamental academic subjects with practical training in workshops and agriculture. Conversely, other reformers advocated for students to engage with scientific disciplines, including natural sciences, chemistry, and geology, according to Givens and Ison (2023).

Zimmerman (2022) noted that the recommendations of these reformers would form a nucleus for the first state curriculum movement in Massachusetts. Just after the Civil War, Massachusetts legislated a system of free public high schools, each offering the same curriculum based on the classic and college-centered course of study. According to Poetter et al. (2022), this was subsequently followed by professional curriculum writing groups, which bundled the ideas of various leading academicians of the society with the existing college curriculum in mind. Senk and Thompson (2020) and Simanjuntak et al. (2022), the famous reports were one of the early versions of such expert curriculum policy writing practices in the United States focused on the organization of curricula and standards of high schools. The purpose of the reports was to ameliorate the eclectic and fragmentary organizational structure of high school curricula at the time.

3. Critical Arguments

3.1 Modern Education Systems

The process of establishing modern education systems was closely linked to nation-building. Established in the late 18th and early 19th centuries, European education systems were built on the political and geographical considerations of the time, based on Acosta (2021). The model was then universalized, with or without adjustments, throughout the 19th and 20th centuries. New colonies in Africa, North America, South America, the Middle East, and Asia were compelled to adopt and develop education systems by former powers. Epitomized by open competition in military empire-building, the influence was publicly declared and supported by military, commercial, religious, and cultural means, as noted by Gandhi et al. (2020). The major

Article-Review History:
Received: 2025-02-20; Revised: 2025-003-03; Accepted: 2025-03-06
About the Author:
Em & Khampirat

colonial and linguistic backgrounds at the time were Latin, Germanic, and Soviet. The respective European education systems became anchor models—emulating, if not defaulting to, the colonies placed under their influence (Woldegiorgis, 2021).

The nation-building orientation is very important, as both the military and economic power of the state were highly dependent upon the results of the education system (Yengoyan, 2023). The elaborate organization and infrastructure were often considered large enough for an effective and permanent future, without further investment or adjustment (Hameiri & Jones, 2024). However, a comparison of the historical facts with the concurrent intention to form a learned elite always creates a considerable discrepancy. Since ancient times, an education system intending to serve the state itself and not the population has been revealed to be less efficient and effective and less responsive to innovation, according to Liu et al. (2020). Cheung (2021) revealed that such a national defense system brings with it the weakness of rigidity, inadequate performance, and unrestricted obedience. Instead of advancing viable and productive members, it may well produce a sluggish elite that could block legitimate change and academic advances in knowledge.

A. The Rise of National Education Systems

As the nation-state rose to prominence throughout the 18th and 19th centuries, many nations began to develop national education systems. Often fueled by a desire to create loyal citizens, these systems played a fundamental role in fostering national identity (De Wit & Merkx, 2022). Yet, in becoming national systems, these models also created a significant level of consistency within countries. Formal education had almost always been placed to some collective or national purpose. This was rooted not just in practical shifts toward a school organization of society, but in more complex ideologies that linked the spread of mass schooling and the national state (Tröhler, 2020). As a consequence of this mass education, uniformity across educational systems began to rise within each nation (Holmes, 2022).

Guided by strong national beliefs, nations began to take a more active role in promoting and enforcing educational standards. Conflicts and discrepancies over what should be taught in schools helped create a more formalized and enforced set of standards (Sahlberg, 2021). These national education systems played a foundational role in eliminating the once broad spectrum of education that was offered within nations (Rall et al., 2022). Politically speaking, a convincing argument can be made that the development of national education systems played an important role in the

elimination of diversity within our American education system. By endorsing compulsory education and designing a system around reading, writing, and arithmetic, these countries began to shape the educational landscape into what we know it to be today (Baltodano, 2023).

B. The Impact of World Wars and Globalization

The rise of the United States as an industrial power at the turn of the century and its engagement in World War I fundamentally transformed U.S. life and education. A transformation in education during this time led to fewer people being prepared for the practice of occupation and greater academic preparation for the few who pursued higher learning (Schofer et al., 2021). Schooling for citizenship and the cultivation of democratic values once again became a focus of the curriculum. Support for the war became the rationale for states to strengthen their abilities to police students and teachers, and the conflict further accelerated the influx of people to the cities and changes in jobs and manufacturing (Kołczyńska, 2020).

Requirements of industrialization, urbanization, and war soon came into conflict with each other. As an emerging industrial nation, the United States had to organize its production schedules globally. So too, the nation had to educate its own citizens or immigrant children who were so diverse from each other under the common banner of American citizenship (Colbern & Ramakrishnan, 2020; Westheimer, 2024). Ideas developed about how best to deal with these conflicting goals, yet little was known about their practical results or when they should take place. Nevertheless, we have an interest in the evolving fallout engendered from these early efforts to standardize what every child should study (Kraft, 2020; Kubiszyn & Borich, 2024).

3.2 EMERGENCE OF CURRICULUM STANDARDS

The United States has experienced three major movements concerning more formal attempts to specify the content and learning objectives for schools or the curricula students should experience (Drake & Reid, 2020). In keeping with the earlier discussion, it should be noted that national curricular movements were initiated during the first two and last two decades of the present century. The first and last movements have largely dealt with the cognitive aspect of the curriculum - a concern for specifying knowledge that should be learned - hence the lesser significance and usage of the term curriculum standard (Russell, 2020).

While there have been many lengthy debates about the efficacy of the various curriculum standards and guides that have been developed to date, the literature is nonetheless conspicuously void of investigations of the precipitants, antecedents, attributes, essential features, and indicators of

useful curriculum standards for schools and the roles of the stakeholders in their development, adoption, use, and revision (Mandinach & Schildkamp, 2021). It can be questioned why, in the late 20th century and despite investments of staggering amounts of scarce resources in the production and adoption of official statements and plans of what students should learn so little research has been carried out about these documents from the perspective of their embeddedness in larger educational enterprises, and the extent to which various actors and agencies take part in the making of and discuss what relevance the curriculum standards have to society (De Wit & Altbach, 2021). Because curriculum standards are viewed independently and uncontroversially by some as straightforward specifications of what makes up powerful knowledge, the difficulty is in admitting to the inconsistencies, necessary complexity, degrees of subjectivity, and hidden dimensions of the process of making curriculum standards and determining how they can be taken into account (Hodson, 2020). Given the growing interest in attending to their intended effects in ensuring consistent high-quality education, this chapter begins with a description of laboratory standards, a form of standards that are less costly to develop and seemingly less contentious to establish. After pointing out some of the hidden implications of adopting curriculum standards, it discusses several essential aspects of curriculum standards and implications about the potential barriers to implementing curriculum decisions. It concludes that knowledge is not all that should be known. The specifications for ensuring learning and use of knowledge also have to be considered (Creager, 2021).

A. Early 20th Century Developments

Historical accounts of the development of the American curriculum suggest that little happened in the early 20th century. The few regulations that did exist were largely administrative, mainly aimed at helping the teacher by standardizing the order of subjects or by situating the courses against the examination timetable (Rudolph, 2021). New York and Massachusetts have been mentioned as forerunners. At the time the first standardized examinations were established, it was decided that progress in elementary education could never be made so long as there was chaos then existing concerning the preparation for the examination (Ravitch et al., 2022). To eliminate this confusion, applications for admission to the examination were classified under general headings; then these groups of studies, and finally the subjects were classified. Two years were allowed for these arrangements to be carried out (Ravitch et al., 2022).

Journal of Education Innovation & Language Teaching (JEILT)
Peer-Reviewed Journal; Vol. 1, No. 1, pp34-52, 2025
ISSN:3080-4760 (Online); ISSN: 3080-0471 (Print)
DOI: https://doi.org/10.63381/jeilt.v1i1.29
https://jeilt.org
info@jeilt.org

In New York State, a standardized course in Regent's examination subjects was first advanced in a pamphlet. In 1941, approximately one-fifth to one-fourth of the states mentioned had some state legislation aimed at unifying the course of study for secondary schools (Stole, 2021). In sum, no state on the Pacific Coast, in the Mountain States, or the territories then organized as Wyoming, New Mexico, or Arizona had any state laws of this sort, nor did any of the newer states of the North or North Central portions of the United States (Volansky, 2023). The states with laws of this type more nearly formed two units. First, we have the New England, Eastern, and Middle Atlantic States, plus Kansas and Kentucky, about them. The other members of the Middle West, plus Illinois, served as an approximation of a second unit of the same kind (McEvoy, 2022).

b. Mid to Late 20th Century Innovations

Following the demise of the Unit Idea curriculum task force, the 1950s through the early 1960s contained a notable lack of explicit, written recommendations for what school subjects should or should not be included as a part of the high school program of studies. Similarly, there was little research that even tried to describe the program then actually in existence (Fensham, 2022). Parallel findings have been made in studies of actual secondary curriculum listings. That is the lack of concerted pressure to limit the high school curriculum, other than in the Improvement Program stimulating curriculum consolidation and in the program of school accountability focused on basic knowledge within the fields of science, English, and social studies, seems to have greatly contributed to the sharp expansion in offerings (Qiao et al., 2024). During the mid-1960s, the often-exclusive preoccupation with purely school outcomes and a lack of actual content subject focus was reversed. This reversal was fueled by a greatly enhanced interest in content area curriculum development. The surge occurred both on the part of state and city education governing bodies initiating some sort of plan for a core curriculum for the often-over-bloated high school program or toward actual positive course curriculum construction efforts by teachers (Henrekson & Wennström, 2022). There were now a dozen significant studies with specific affirmative program directions being put forward. These developments suggested that a body of content fields would or could be embraced and supported and, consequently, that pupils would or could be exposed to them. In other words, the rush during the 1960s was not simply toward better secondary programs. Rather, the rush was given great impetus by the desire to make available and implement programs comprising specific subject matter within those areas

Article-Review History:
Received: 2025-02-20; Revised: 2025-003-03; Accepted: 2025-03-06
About the Author:
Em & Khampirat

traditionally considered to be foundations in various university programs (Mandler, 2020).

3.3 CONTEMPORARY CURRICULUM STANDARDS

As we write about contemporary curriculum standards, we do so with a sense of irony—for in over ten years of work on the project, we quickly encountered the problem that a consideration of the set of current curriculum standards will be outdated soon after set in print. Since the 19th century, curriculum has been conceptualized by educators as a set of planned arrangements of resources and strategies for obtaining purposes of schooling (Gouëdard et al., 2020). These purposes are influenced by social and political factors. Specifically, certain groups of people want and need a curriculum that serves certain interests. In most democratic nations, educators, acting as public citizens, historically have met regularly to articulate consensus, arrive at public governance, and hold public trust to propose purposes for their nation and suggest means to achieve those purposes (Paraskeva, 2021).

The US public school curriculum typically has been designed along four related strands, including the curriculum-in-action, or textbooks and other materials designed to carry out national and state curriculum standards in classrooms; suggested reading lists; national competitive content in the disciplines; and localized curricular decisions that usually supplement broad content requirements (Park et al., 2020). Each occurs in the context of philological, professional, and operational quarters in the nation. Such standards are like guideposts. While they do not tell us where to go, they do tell us where certain people have traveled, the destinations of some people to whom we give authority, and the importance of valuing that journey. Such standards are important reminders of the need for varied perspectives in the life of a nation built upon the principles of a republic (Johnson et al., 2023).

3.4 FUTURE DIRECTIONS IN CURRICULUM STANDARDS

Our review identified significant challenges and concerns in curriculum standards. The discourse among educators is influenced, and sometimes dominated, by economic or political ideologies that elevate certain educational goals at the expense of others. Access to educational opportunities promised in standards has not been realized (Tasdemir & Gazo, 2020). Political demands for higher test scores and economic competitiveness have resulted in test-driven schooling versus a well-rounded education, which ultimately could threaten our democracy (Fensham, 2022; Martinez, 2022). The local professional discretion of educators and schools has been eroded, not enhanced, leading to difficulties

in implementing the standards defined within traditional standards-based reform frameworks. Many educators are challenged with the fidelity of implementing rich, high-quality curriculum experiences for students (Simanjuntak et al., 2022; Tasdemir & Gazo, 2020). Teachers struggle to incorporate feasible instructional strategies, teaching resources, and assessments to address multiple learning needs while keeping students engaged and maintaining motivation for the learning objectives. While daunting, challenges and concerns also provide opportunities to redefine, innovate, and evolve curriculum design standards (Roehrig et al., 2021). Tasks for educators may include working within current standards-based systems. Larger questions are also signaled, and such questions may receive attention through shifts from traditional education to redefined learning settings (Poetter et al., 2022). Other important questions will need to be targeted by implementing competent, popular alternatives. Below are some future directions to a set of questions that take the form of tasks to meet current standards demands as well as novel ideas to redefine a curriculum through a set of three promising philosophical, theoretical, and empirical evolutionary areas (Hodson, 2020; McGuinness, 2023; Tasdemir & Gazo, 2020).

The impact of technology on assessments is less clear. The changing role of professionals and the increasing infusion of technology need to be considered in credentialing requirements (Martinez, 2022). Traditional licensure examinations are affected by recently occurring advancements in computerization, examination development, and future test administration. The infusion of new technologies in the process and the delivery method of high-stakes accountability examinations enable new question formats, integrated cut scores, a more trusting, efficient, coherent test design with computer-adaptive testing, and reverse accommodations (Fensham, 2022). These technological advancements genuinely represent a long-overdue and significant paradigm shift that would substantially reduce the available anxiety and validity threats associated with high-stakes licensure examinations (Pluim et al., 2020).

From a practical perspective, the latest advancements in automated scoring systems can be applied to create online assessment items across grade levels and subjects that are both aligned with standards and meet the new content expectations that could formally assess college and career readiness skills (Rapanta et al., 2021; Tröhler, 2020). That is, one was able to use technology to transform assessment policy into reality. For example, innovative designs in the fields of science and mathematics, and both the items and the aligned

student responses succeed in assessing students' content understanding and mathematical and verbal communication skills as they relate to academic and workforce-related activities (Rall et al., 2022; Roehrig et al., 2021). Before questions that focus on computer-authored prompts and student-generated responses, technology can be used to normalize or obviate the need for captive conditions (Drake & Reid, 2020; Russell, 2020).

4. Conclusion

Last, but not least, this article thoroughly examines the progression of curriculum standards in higher education, detailing significant research over the past 30 years. It emphasizes the intersections of curriculum development, academic standards, and quality assurance while correcting deficiencies in historical study. The study highlights the significant impact of political, economic, and social variables on curricular practices and advocates for deeper investigation of these influences to improve the comprehension and application of curriculum standards moving forward. Future studies should investigate the impact of emerging technologies on curriculum standards and assessment, incorporate diverse global perspectives to promote inclusivity, and facilitate dialogue among policymakers, educators, and researchers to establish adaptable, evidence-based standards that uphold local autonomy and global educational goals.

Reference

Abbott, D. P. (2020). Reading, writing, and rhetoric in the Renaissance. In J. J. Murphy & C. Thaiss (Eds.), *A short history of writing instruction* (pp. 165–194). Routledge. https://doi.org/10.4324/9781003020899-5

Acosta, F. (2021). Nation-states, nation-building, and schooling: The case of Spanish America in the long 19th century. In D. Tröhler, N. Piattoeva, & W. F. Pinar (Eds.), *World Yearbook of education 2022* (pp. 29–45). Routledge. https://doi.org/10.4324/9781003137801-4

Baltodano, M. (2023). Neoliberalism and the demise of public education: The corporatization of schools of education. In B. M. A. Jones & S. J. Ball (Eds.), *Neoliberalism and education* (pp. 78–98). Routledge. https://doi. org/10.4324/9781003253617-5

Borokhovski, E. F., Tamim, R. M., Bernard, R. M., & Schmid, R. F. (2020). Promises and prospects of educational technology, evidence from systematic reviews and meta-analyses. *Encyclopedia of Education and Information Technologies*, 1395–1412. https://doi.org/10.1007/978-3-030-10576-1_99

Cadge, W., Stroud, I. E., Palmer, P. K., Fitchett, G., Haythorn, T., & Clevenger, C. (2020). Training chaplains and spiritual caregivers: The emergence and growth of chaplaincy programs in theological education. *Pastoral Psychology*, *69*, 187–208. https://doi.org/10.1007/s11089-020-00906-5

Che, E. S., Brooks, P. J., Schwartz, A. M., Saltzman, E. S., & Whiteman, R. C. (2023). How do graduate students approach college teaching? Influences of professional development, teaching assistantships, and Big Five personality traits. *Frontiers in Education*, *8*, 1–15. https://doi.org/10. 3389 /feduc.2023.982998

Cheung, T. M. (2021). A conceptual framework of defense innovation. *Journal of Strategic Studies*, *44*(6), 775–801. https://doi.org/10.1080/ 01402390.2021.1939689

Colbern, A., & Ramakrishnan, S. K. (2020). *Citizenship reimagined: A new framework for state rights in the United States*. Cambridge University Press. https://cir.nii.ac.jp/crid/1130859358803843372

Creager, A. N. (2021). To test or not to test: Tools, rules, and corporate data in US chemicals regulation. *Science, Technology, & Human Values*, *46*(5), 975–997. https://doi.org/10.1177/01622439211013373

De Wit, H., & Altbach, P. G. (2021). Internationalization in higher education: Global trends and recommendations for its future. *Policy Reviews in Higher Education*, *5*(1), 28–46. https://doi.org/10.1080/23322969. 2020.1820898

De Wit, H., & Merkx, G. (2022). The history of the internationalization of higher education. In D. K. Deardorff, H. d. Wit, B. Leask, & H. Charles (Eds.), *The Handbook of International Higher Education* (pp. 23–52). Routledge. https://doi.org/10.4324/9781003447863-3

Drake, S. M., & Reid, J. L. (2020). 21st-century competencies in light of the history of integrated curriculum. *Frontiers in Education*, *5*, 1–10. https://doi.org/10.3389/feduc.2020.00122

Felten, P., & Lambert, L. M. (2020). *Relationship-rich education: How human connections drive success in college*. Johns Hopkins University Press. https://www.tcrecord.org/

Fensham, P. J. (2022). The future curriculum for school science: What can be learned from the past? *Research in science education*, *52*(S1), 81–102. https://doi.org/10.1007/s11165-022-10090-6

Flinders, D. J., & Thornton, S. J. (2021). *The curriculum studies readers*. Taylor & Francis. https://www.tcrecord.org/

Gandhi, M., Beyrer, C., & Goosby, E. (2020). Masks do more than protect others during COVID-19: reducing the inoculum of SARS-CoV-2 to protect the wearer. *Journal of General Internal Medicine*, *35*(10), 3063–3066. https://doi.org/10.1007/s11606-020-06067-8

Givens, J. R., & Ison, A. (2023). Toward new beginnings: A review of native, white, and black American education through the 19th century. *Review of Educational Research*, *93*(3), 319–352. https://doi.org/10.3102/ 00346543221105544

Gouëdard, P., Pont, B., Hyttinen, S., & Huang, P. (2020). *Curriculum reform: A literature review to support effective implementation*. OECD. https:// doi.org/10.1787/19939019

Hameiri, S., & Jones, L. (2024). Why the West's alternative to China's international infrastructure financing is failing. *European Journal of International Relations*, *30*(3), 697–724. https://doi.org/10.1177/1354 0661231218573

Henrekson, M., & Wennström, J. (2022). *Dumbing down: The crisis of quality and equity in a once-great school system—and how to reverse the trend*. Springer Nature. https://doi.org/10.1007/978-3-030-93429-3

Hodson, D. (2020). Going beyond STS education: Building a curriculum for sociopolitical activism. *Canadian Journal of Science, Mathematics and Technology Education*, *20*, 592–622. https://doi.org/10.1007 /s42330-020-00114-6

Holmes, B. (2022). *Equality and freedom in education: A comparative study*. Taylor & Francis. https://cir.nii.ac.jp/crid/1130282271796670464

Jakovljevic, M., Liu, Y., Cerda, A., Simonyan, M., Correia, T., Mariita, R. M., Kumara, A. S., Garcia, L., Krstic, K., & Osabohien, R. (2021). The Global South political economy of health financing and spending landscape–history and presence. *Journal of Medical Economics*, *24*(1), 25–33. https://doi.org/10.1080/13696998.2021.2007691

Johnson, C. C., Walton, J. B., Strickler, L., & Elliott, J. B. (2023). Online teaching in K-12 education in the United States: A systematic review. *Review of Educational Research*, *93*(3), 353–411. https://doi.org/10.3102/00346543221105550

Khalil, R., Mansour, A. E., Fadda, W. A., Almisnid, K., Aldamegh, M., Al-Nafeesah, A., Alkhalifah, A., & Al-Wutayd, O. (2020). The sudden transition to synchronized online learning during the COVID-19 pandemic in Saudi Arabia: A qualitative study exploring medical

students' perspectives. *BMC Medical Education*, 1–10. https://doi.org/10.1186/s12909-020-02208-z

Kim, D. (2020). Learning language, learning culture: Teaching language to the whole student. *ECNU Review of Education*, *3*(3), 519–541. https://doi.org/10.1177/2096531120936693

Kołczyńska, M. (2020). Democratic values, education, and political trust. *International Journal of Comparative Sociology*, *61*(1), 3–26. https://doi.org/10.1177/0020715220909881

Kraft, M. A. (2020). Interpreting effect sizes of education interventions. *Educational researcher*, *49*(4), 241–253. https://doi.org/10.3102/0013189X20912798

Kubiszyn, T., & Borich, G. D. (2024). *Educational testing and measurement*. John Wiley & Sons. https://cir.nii.ac.jp/crid/1130282268862468352

Li, H., & Chen, J. J. (2017). Evolution of the early childhood curriculum in China: The impact of social and cultural factors on revolution and innovation. *Early Child Development and Care*, *187*(10), 1471-1483.

Liu, Z.-Y., Lomovtseva, N., & Korobeynikova, E. (2020). Online learning platforms: Reconstructing modern higher education. *International Journal of Emerging Technologies in Learning (iJET)*, *15*(13), 4-21. https://www.learntechlib.org/p/217605/

Mandinach, E. B., & Schildkamp, K. (2021). Misconceptions about data-based decision making in education: An exploration of the literature. *Studies in Educational Evaluation*, *69*, 1-10. https://doi.org/10.1016/j.stueduc.2020.100842

Mandler, P. (2020). *The crisis of the meritocracy: Britain's transition to mass education since the Second World War*. Oxford University Press. https://cir.nii.ac.jp/crid/1130567907376625280

Martinez, C. (2022). Developing 21st-century teaching skills: A case study of teaching and learning through project-based curriculum. *Cogent Education*, *9*(1), 1–17. https://doi.org/10.1080/2331186X.2021.2024936

McEvoy, A. F. (2022). Towards an interactive theory of nature and culture: Ecology, production, and cognition in the California fishing industry. In J. R. McNeill (Ed.), *Environmental history in the Pacific world* (pp. 251–267). Routledge. https://doi.org/10.4324/9781315256313-11

McGuinness, C. (2023). *Implementing a key competency approach to curriculum*. Queen's University Belfast. https://ncca.ie/media/6544/key_competencies_lessons_learned.pdf

McLachlan, C., Fleer, M., & Edwards, S. (2018). *Early childhood curriculum: Planning, assessment, and implementation*. Cambridge University Press. https://doi.org/10.1017/9781108131810

Nokes, J. D. (2022). *Building students' historical literacies: Learning to read and reason with historical texts and evidence* (2 ed.). Routledge. https://doi.org/10.4324/9781003183495

Paraskeva, J. M. (2021). *Conflicts in curriculum theory: Challenging hegemonic epistemologies*. Springer. https://doi.org/10.1007/978-3-030-77420-2

Park, W., Wu, J.-Y., & Erduran, S. (2020). The nature of STEM disciplines in the science education standards documents from the USA, Korea, and Taiwan: Focusing on disciplinary aims, values, and practices. *Science & Education*, *29*(4), 899–927. https://doi.org/10.1007/s11191-020-00139-1

Pluim, G., Nazir, J., & Wallace, J. (2020). Curriculum integration and the semicentennial of Basil Bernstein's classification and framing of educational knowledge. *Canadian Journal of Science, Mathematics and Technology Education*, *20*, 715–735. https://doi.org/10.1007/s42330-021-00135-9

Poetter, T. S., Waldrop, K., & Raza, S. H. (2022). *Curriculum windows redux: What curriculum theorists can teach us about schools and society today*. IAP. https://eric.ed.gov/?id=ED623517

Qiao, X., Zheng, J., Yang, Y., Liu, L., & Chen, Z. (2024). How does urbanization impact the supply-demand relationship of agroecosystem services? Insights from farmland loss in the Huaihe River Basin, China. *Ecological Indicators*, *158*, 1–14. https://doi.org/10.1016/j.ecolind. 2023.111406

Rall, R. M., Dominguez, V., & Garcia, A. (2022). What does it take to lead: The hidden curriculum of qualifications for service on public boards of higher education. *Teachers College Record*, *124*(1), 191–226. https://doi.org/10.1177/01614681221086116

Rapanta, C., Vrikki, M., & Evagorou, M. (2021). Preparing culturally literate citizens through dialogue and argumentation: Rethinking citizenship education. *The Curriculum Journal*, *32*(3), 475–494. https://doi.org/10.1002/curj.95

Ravitch, D., Forte, D., Moss, P., & Reville, P. (2022). Policy dialogue: Twenty years of test-based accountability. *History of Education Quarterly*, *62*(3), 337–352. https://doi.org/10.1017/heq.2022.19

Roehrig, G. H., Dare, E. A., Ring-Whalen, E., & Wieselmann, J. R. (2021). Understanding coherence and integration in integrated STEM curriculum. *International Journal of STEM Education*, *8*, 1–21. https://doi.org/10.1186/s40594-020-00259-8

Ruano-Borbalan, J. C. (2022). Doctoral education from its medieval foundations to today's globalization and standardization. *European Journal of Education*, *57*(3), 367–380. https://doi.org/10.1111/ejed.12522

Rudolph, F. (2021). *The American college and university: A history*. Plunkett Lake Press. https://cir.nii.ac.jp/crid/1130000793816926336

Russell, D. R. (2020). American origins of the writing-across-the-curriculum movement. In C. Bazerman & D. Russell (Eds.), *Landmark essays on writing across the curriculum* (pp. 3–22). Routledge. https://doi.org/10.4324/9781003059219-2

Sahlberg, P. (2021). *Finnish Lessons 3.0: What can the world learn from educational change in Finland?* Teachers College Press. https://cir.nii.ac.jp/crid/1130299042337753604

Schofer, E., Ramirez, F. O., & Meyer, J. W. (2021). The societal consequences of higher education. *Sociology of Education*, *94*(1), 1–19. https://doi.org/10.1177/0038040720942912

Senk, S. L., & Thompson, D. R. (2020). *Standards-based school mathematics curricula: What are they? What do students learn?* Taylor & Francis. https://cir.nii.ac.jp/crid/1130000794931894272

Shaheen, M., Mayhew, M. J., & Staples, B. A. (2021). StateChurch: Bringing religion to public higher education. *Religions*, *12*(5), 1–17. https://doi.org/10.3390/rel12050336

Simanjuntak, M. B., Suseno, M., Setiadi, S., Lustyantie, N., & Barus, I. R. G. R. G. (2022). Integration of curricula (curriculum 2013 and Cambridge curriculum for junior high school level in three subjects) in a pandemic situation. *Ideas: Jurnal Pendidikan, Sosial, dan Budaya*, *8*(1), 77–86. https://doi.org/10.32884/ideas.v8i1.615

Stole, I. L. (2021). Advertising America: official propaganda and the us promotional industries, 1946–1950. *Journalism & Communication Monographs*, *23*(1), 4–63. https://doi.org/10.1177/1522637920983766

Tasdemir, C., & Gazo, R. (2020). Integrating sustainability into higher education curriculum through a transdisciplinary perspective. *Journal of Cleaner Production*, *265*, 1–14. https://doi.org/ 10.1016/j.jclepro.2020.121759

Thalén, P., & Carlsson, D. (2020). Teaching secular worldviews in a post-secular age. *Religion & Education*, *47*(3), 243–256. https://doi.org/10.1080/15507394.2020.1785811

Toffler, A. (2022). *Powershift: Knowledge, wealth, and power at the edge of the 21st century*. Random House Publishing Group. https://cir.nii.ac.jp/crid/1130000798386776576

Tröhler, D. (2020). National literacies, or modern education and the art of fabricating national minds. *Journal of Curriculum Studies*, *52*(5), 620–635. https://doi.org/10.1080/00220272.2020.1786727

Volansky, A. (2023). *The three waves of reform in the world of education 1918–2018: Students of yesterday, students of tomorrow*. Springer. https://doi.org/10.1007/978-981-19-5771-0

Westheimer, J. (2024). *What kind of citizen? Educating our children for the common good*. Teachers College Press. https://cir.nii.ac.jp/crid/1131412329604176640

Woldegiorgis, E. T. (2021). Decolonizing a higher education system that has never been colonized. *Educational Philosophy and Theory*, *53*(9), 894–906. https://doi.org/10.1080/00131857.2020.1835643

Yengoyan, A. (2023). Transformations of the ideology of nation-building and state-building in Armenia: Phenomenon of integrity of nation and state. *Journal of Political Science: Bulletin of Yerevan University*, *2*(1), 70–101. https://doi.org/10.46991/JQFS/2023.2.4.070

Zapp, M., & Lerch, J. C. (2020). Imagining the world: Conceptions and determinants of internationalization in higher education curricula worldwide. *Sociology of Education*, *93*(4), 372–392. https://doi.org/10.1177/0038040720929304

Zimmerman, J. (2022). *Whose America? Culture wars in the public schools*. University of Chicago Press. https://cir.nii.ac.jp/crid/1130282271355960192

Journal of Education Innovation & Language Teaching (JEILT)
Peer-Reviewed Journal; Vol. 1, No. 1, pp53-75, 2025
ISSN:3080-4760 (Online); ISSN: 3080-0471 (Print)
DOI: https://doi.org/10.63381/jeilt.v1i1.38
https://jeilt.org
info@jeilt.org

Effective Strategies of English Teaching in Cambodia's Underserved Communities: Bridging Digital Divide to Access Education Quality

Sovanna Huot[1]*, Sereyrath Em[2]

1*Corresponding author: University of Delhi, New Delhi, India, ORCiD: https://orcid.org/0009-0006-8335-442X , shuot@polscience.du.ac.in
2.Suranaree University of Technology, Nakhon Ratchasima, 30000, Thailand, ORCiD: https://orcid.org/0000-0002-6803-195X, sereyrathem.edu@gmail.com

To cite this article: Huot, S., & Em, S. (2025). Effective strategies of English teaching in Cambodia's underserved communities: Bridging digital divide to access education quality. *Journal of Education Innovation and Language Teaching (JEILT)*, *1*(1), 53-75.

Abstract

Numerous disadvantaged populations lack equitable access to technology, and education is particularly challenging in developing contexts due to instructors often lacking technological proficiency. Nevertheless, digital learning can markedly enhance students' academic success in language acquisition, especially when facilitated by digital technology. This research utilized a panel data set to analyze and assess the strategies employed by teachers to effectively enhance English language proficiency among students in a disadvantaged and under-resourced community. The digital education of the English language was analyzed, encompassing aspects such as curriculum design, instructional pacing, and scaffolding strategies that use technological optimization. Best practices incorporated into digital English language instruction included digital curriculum specialization, teachers' technological proficiency, technology for personalized learning, multiple-gain assessment strategies, and partnerships with technology companies to support underserved schools. The discourse also encompassed the subject of maintaining reasonable expectations for the outcomes of technology pilot initiatives. The results indicated that educators utilizing digital resources to facilitate blended learning can decrease student dropout rates, improve performance on state English assessments, and concurrently provide students with essential skills for success in the 21st century.

Keywords: *English language teaching; underserved communities; digital divide; technology companies; 21st-century skills*

1. Introduction

Looking back at the last few years, the COVID-19 pandemic has exposed the disparity in digital access to quality education, underscoring the pressing need to address these gaps (Em, 2021; Sanders & Scanlon, 2021). For example, airlines affix instructions on oxygen masks, requiring users to put them on before assisting others. Similarly, this argument applies to the digital divide as well; people cannot use technology for education if they do not know how to use gadgets (Mongelli et al., 2020). As mentioned, many

teachers and students are technology have-nots. Consequently, this paper will then describe this situation while providing examples of effective English language teaching (ELT) in underserved communities (Em, 2022).

The best practices, derived from decades of research and international engagement with educators and students, can benefit teachers concerned about the digital divide's impact (Dias et al., 2020). Throughout, teaching is aside from technology tools and platforms. It is ultimately underlined by the purposeful use of time, instruction, and support (Broadbent et al., 2000). Sustainability and reliability of classroom environment, teacher attitudes, and thoughtful planning are equally as significant as technology itself when adopting and implementing new digital tools. There is a clear difference between simply knowing that digital technologies for teaching and learning exist and truly comprehending how they can be integrated, perceived, and utilized in practice (Burbules et al., 2020; Haleem et al., 2022).

By building on this perspective, the adoption and maintenance of new technologies and digital tools in education do not only depend on the technology itself but also factors such as classroom sustainability, reliability, teacher attitudes, and effective planning. Moreover, there is a distinction between simply being aware of the availability of digital tools for teaching and learning and truly grasping how they can be implemented, experienced, and integrated into practical use (Kwee, 2021). In this context, it is based on the Consortium for Research on Educational Access, Transitions, and Equity (CREATE). Specifically, it is about the examination of English language teaching throughout learning process in developing countries. It emphasizes the global benefits of the integrated and inclusive instruction of languages and digital skills (Fuller et al., 2021). These skills, often emphasized as the essential for modern life, have been foregrounded due to their previously understudied relevance in persistence of COVID-19 pandemic. Consequently, the crisis has exposed stark inequalities in access to digital resources and educational opportunities, revealing a clear divide between privileged and underserved populations. As a result, the aftermath has reinforced the critical urgency to address these disparities and work toward equitable access to quality education for everyone (Correia, 2020; Eruchalu et al., 2021).

For instance, on airplanes, passengers are instructed to put on their oxygen masks before helping others, and this principle can be applied to addressing the digital divide as well. Without the necessary technological skills, one cannot fully utilize technology for educational purposes (Tavares, 2021). Unfortunately, many teachers and students fall into the category of those

who lack these essential critical skills. Therefore, this paper will explore the practical strategies and share the real-life examples of ELT in underserved communities. Additionally, these proven methods, gathered from extensive research, best practices and interactions with the educators and students worldwide, can greatly assist teachers who are concerned about the impact of the digital divide. Finally, it is crucial to remember that teaching goes beyond technology tools and platforms; rather, it is about the deliberate allocation of time, delivering instruction effectively, and providing support (Morita et al., 2020).

To set the context, this recent study will draw upon the comprehensive examination of English language teaching across different stages of learning in developing the countries conducted by CREATE (Mazzotti et al., 2020). Specifically, this examination accentuates the global advantages of an integrated and inclusive approach to the language instruction and the development of digital skills. Further, these skills, long considered essential for modern life, have now assumed heightened significance as their previously underestimated relevance has been highlighted by the ongoing challenges of the persistent COVID-19 pandemic (Biletska et al., 2021; Rubach & Lazarides, 2021).

1.1 Background, Significance, and Purpose

The field of Teaching English to Speakers of Other Languages (TESOL) is at a pivotal moment in history, marked by a growing global demand for English language learning alongside significant inequities in access to quality English language instruction (Rose et al., 2020). Consequently, there is a pressing need for a paradigm shift in English language teaching that establishes sustainable models, ensuring students in underserved communities have both access to English learning opportunities and a high-quality education (Adwan et al., 2021). To address these challenges, it is suggested that a widely successful and cost-effective model of connecting classrooms through global learning be broadly shared. Notably, this initiative traces its origins to 1999, when World Links, an international non-profit specializing in integrating technology into education, facilitated a connection between a high school teacher in California and educators in other parts of the world (Bowen et al., 2021). Over the following two decades, this model expanded significantly, demonstrating that collaborative online projects can broaden students' perspectives and increase 21st-century skills, including messaging, web search, website building, and video editing, among others. Moreover, it has offered valuable professional development opportunities for teachers (Latorre et al., 2021; Miller et al., 2023).

As a result, Connecting Classrooms through Global Learning has expanded to encompass the students and teachers in more than 130 countries. The COVID-19 pandemic has created a unique opportunity to reach middle-income and underserved communities where the families with school-aged children have broadband access. This is a means of those face obstacles such as full enrollment in schools or substandard English instruction that falls short of students' or parents' expectations (Bond et al., 2021). By building on this success, the program has already supported students in Los Angeles, Colombia, and Vietnam. This proposed dissemination project will provide tests over two years, scaling up in response to proven success. Overarching aim is to increase the students' global competency, thereby reducing inequitable learning for the 4.3 million youngsters in low-income settings where English proficiency is considered a pathway to opportunity.

Many of these children are homeschooled in the United States, taking advantage of the equitable broadband access and their desire for quality education. Furthermore, World Links has been providing community schools with a sustainable, efficient, and scalable model that offers underserved children access to technology and fosters responsible digital citizenship. As a result, this initiative assists the community in achieving the SELPA model and escaping the poverty trap (Betancur et al., 2024; Roberts, 2022; Selvi & Yazan, 2021).

One research study has indicated effective English language teaching for underserved student populations in Bangladesh, Brazil, and Mongolia, offered by BRAC, World Fund, and Mercy Corps, respectively (Chang, 2018). Moreover, it addressed the shortfall in relevant and recent studies focusing on effective technology use in learning environments, particularly distance education. COVID-19 pandemic has led to an unprecedented dependence on internet-based learning and instruction. Consequently, it has become more critical than ever to develop a deeper and broader understanding of the mechanisms that enable effective teaching and learning in distance learning settings (Azlan et al., 2020; Bozkurt et al., 2020). To this end, the study examined effective English language instruction and the use of technology, specifically analyzing ELT in underserved settings to ensure access and inclusion (Em et al., 2024). To achieve this goal, the research focuses on initiatives in Cambodia, utilizing a comprehensive theoretical framework to explore the intersection of successful teaching, integration of technology, and equitable educational access.

Journal of Education Innovation & Language Teaching (JEILT)
Peer-Reviewed Journal; Vol. 1, No. 1, pp53-75, 2025
ISSN:3080-4760 (Online); ISSN: 3080-0471 (Print)
DOI: https://doi.org/10.63381/jeilt.v1i1.38
https://jeilt.org
info@jeilt.org

2. Understanding the Digital Divide

The digital divide can be understood in multiple ways and is often framed in terms of access to and availability of technology. This gap in information and communication technology (ICT) highlights the disparities that impact the individuals and communities (Pearsall et al.). While ICTs enable learning, communication, and productivity in many societies (Vassilakopoulou & Hustad, 2023; Ye & Yang, 2020), a significant portion of global population lacks access to these tools and the associated benefits of economic opportunities, health, and education. Disparities also exist in internet usage, with male, educated, and wealthier users experiencing greater advantages, such as employment opportunities (Martínez et al., 2020; Robinson et al., 2020). These inequalities not only affect how the internet is utilized but also influence productivity and welfare, particularly for those lower on the socio-economic ladder. The digital divide is widely recognized as a problem both between and within countries, with ICT adoption being more prevalent in high-income nations than in low- and middle-income counterparts (Appiah & Song, 2021; Karaman et al., 2021).

The high-income countries benefit from the broader access to internet infrastructure, computers, and software, as well as the greater internet diffusion compared to low- and middle-income nations (Kumari & Singh, 2023). Despite the recent expansion of online open and distance learning (ODL), it continues to primarily benefit students from high-income countries (Avanesian et al., 2021). Further, access to advanced scientific knowledge remains largely limited to elite groups in low- and middle-income countries, as the institutions that disseminate this knowledge, such as universities, are predominantly located in high-income nations. These realities underscore the critical role of the digital divide in shaping open and distance learning (ODL) and its associated challenges (Marginson & Xu, 2023). From the outset, it is essential to distinguish our in-depth understanding of highly efficient English language teaching. On a global scale, the basis of effective language instruction is rooted in the concept of communicative language teaching, which is deeply influenced by Chomsky's significant interactionist approach to second language acquisition. Notably, it is widely recognized that the level of interaction in language classes directly correlates with their effectiveness (Alharbi J. M., 2023; Hamamouche et al., 2022). As a result, it is vital to offer students abundant opportunities to actively and meaningfully engage in language use, fostering the growth of their communication skills and strategies.

Article-Review History:
Received: 2025-03-03; Revised: 2025-03-12; Accepted: 2025-03-20
About the Author:
Huot & Em

To further enhance this process, integrating pair and group activities in authentic contexts enables students to engage with both their peers and instructors (Burdujan, 2024). Through these activities, students not only strengthen their skills in comprehension, speaking, and listening, but also build a well-rounded grasp of vocabulary, grammar, and pronunciation. Consequently, this enhances the overall communication abilities. However, it is important to note that the nature of English language teaching varies significantly depending on context (Cenoz & Gorter, 2020; Fishman, 2020). In particular, contexts where English serves as the medium of instruction for general education should receive immediate attention.

In response to this need, the English Plus curriculum emerges as a promising approach that promotes an integrated teaching methodology, combining both general education subjects and English language classes (Christison & Murray, 2021; Meng-yue et al., 2020). This method has been thoroughly tested, and its success is evident, particularly in Southeast Asia. As a testament to its effectiveness, foreign governments are increasingly adopting a similar model, influenced by leadership studies that support the use of mother-tongue-based bilingual education (MTE). Ultimately, this shift toward MTE signifies growing awareness and recognition of its positive impact on language acquisition and education as a whole (Monje et al., 2021; Waheed et al., 2020).

3. Challenges of ELT in Underserved Communities

The challenges faced by these communities in the field of ELT are undeniably substantial and multifaceted (Tavakol & Tavakoli, 2023). One of the most evident issues lies in infrastructure, where differences such as well-kept roads and consistent electricity are quite noticeable. In addition, the digital gap within these communities is deep, resulting in limited availability of current English learning materials and a shortage of qualified instructors (Hazaea et al., 2021). Beyond infrastructure and digital limitations, certain communities have also struggled with challenges related to regionalism over the past few decades. Specifically, power has often been concentrated in the hands of a ruling elite that is culturally and politically distinct from the majority of the population (Heng et al., 2022). As a result, this dynamic has created unique barriers to the successful implementation of English language education (Shohel et al., 2022). For instance, the children were frequently taught English through rote memorization of grammar rules, with little emphasis on understanding and meaningful communication. This outdated approach was further reinforced by physical discipline or corporal punishment.

In some rural areas, Confucian-influenced societies exacerbated these obstacles by marginalizing women's voices and limiting participation in communication activities (Jakubiak, 2019). Furthermore, English language programs often faced resistance and pushback from political leaders, who viewed English as a symbol of Western influence and a threat to the preservation of local cultures. This perception, in turn, hindered efforts to effectively integrate English into educational systems (Taylor, 2024). Historically, initiatives to advance English language education encountered significant resistance, particularly during the 1980s-1990s, when English was perceived as a marker of Western influence that threatened local cultures and hindered effective educational progress. To address these challenges, a comprehensive and thoughtful approach is required—one that considers the distinct social, cultural, and political dynamics of the communities involved. At the same time, the efforts must also strive for the meaningful inclusion of the marginalized voices while preserving the cultural identity (Henderson & Jones, 2021).

3.1 Limited Access to Technology

The utilization of technology to assist language learners is prevalent globally; however, variations in accessibility and proficiency levels persist (Haleem et al., 2022). For instance, in Cambodia, technology has broadened educational prospects, especially in remote areas, through institutions like Universities (Sok & Bunry, 2023). Despite these advancements, the benefits are mainly limited to urban areas due to factors like income and education levels, resulting in a digital gap with the far-reaching consequences for students worldwide (Jamil, 2021). To bridge this gap, it is very crucial to invest in technology infrastructure and digital literacy programs across the country to ensure equitable opportunities for all citizens. In this regard, collaboration between the public and private sectors can play a key role in making internet access and devices more affordable and accessible in underserved regions (Hambly & Rajabiun, 2021). Moreover, investing in advanced technological solutions and improving infrastructure connectivity will establish a strong ecosystem that promotes innovation and empowers learners to thrive in the digital era (Tang, 2022).

In addition to the infrastructure development, creating the technological ecosystems that are accessible requires strategic partnerships with tech companies and educational organizations. By working together, these groups can create game-changing programs that empower students through customized apps, online resources, and interactive platforms (Benitez et al., 2020). Importantly, promoting digital literacy among educators, students,

and broader community is essential for effective utilization of technology in education and personal development. By equipping the teachers with the necessary skills and resources, they can seamlessly integrate technology into their teaching practices and design dynamic learning environments that cater to diverse student needs (Liu et al., 2020). At the same time, students should receive a thorough education in digital literacy, enabling them to safely navigate the digital world, evaluate information critically, and use technology effectively for educational purposes. Furthermore, community involvement is critical, as it builds support networks and encourages lifelong learning beyond the classroom (Aguilar, 2020).

On a broader scale, global collaboration and partnerships play a crucial role in bridging the worldwide digital divide and ensuring equitable access to technology for all learners. In this case, the international organizations, governments, and educational institutions can foster knowledge exchange, resource sharing, and capacity building, leading to sustainable solutions that transcend borders (Buchholz et al., 2020). Specifically in Cambodia, these partnerships can facilitate development and implementation of innovative strategies to address the challenges, as such limited access to electricity and connectivity in remote areas (Vai et al., 2020). In brief, while technology aids language learners worldwide, Cambodia faces notable barriers to narrowing the digital divide. These challenges can be addressed through investments in infrastructure, digital literacy programs, and international partnerships. By prioritizing equal access to the technology, empowering educators and learners, and fostering global collaboration, Cambodia can overcome these obstacles and unlock the full potential of its citizens, ensuring a brighter future for generations to come.

3.2 Lack of Resources and Infrastructure

The shortage of the resources and infrastructure is closely related to the socioeconomic gap that persists in many countries, contributing to the digital divide. This issue has become even more pronounced during the COVID-19 pandemic (Vassilakopoulou & Hustad, 2023). Similarly, unequal access to information and technological resources greatly contributes to the widening of social and economic inequalities among the individuals and communities (Tewathia et al., 2020). For instance, while some students within a school community benefit from access to a wide range of technological resources, others lack even the most necessities, such as electricity, radio, mobile devices, internet connectivity, and a quiet place for learning (Koch, 2022). Numerous micro- and macro-level variables play a

role in shaping the current realities and prospects in education and career paths (Pearsall et al., 2021).

Despite the extensive emphasis on high-tech solutions for education, as such educational software, apps, web-based online learning platforms, coding workshops, virtual and augmented reality environments, and educational games designed to enhance students' learning are highlighted, these innovations exclude a large portion of students in today's world (Ejaz & Mallawaarachchi, 2023; Em, 2023). In fact, these benefits are accessible only to those with the privilege of using the latest digital tools, further deepening and perpetuating the digital divide. Likewise, the lack of access to the technology places the underfunded public education systems and disadvantaged communities at an even greater risk of being marginalized (Qureshi, 2021). Given that education acts as both a means of enhancing socioeconomic status and an instigator of social mobility, it is crucial to guarantee fair access to the basic components, including technology and information (Rich & Pather, 2020).

4. Opportunities for Equitable Access

Incorporating technology in English language programs can greatly increase students' motivation to learn and provide them with greater access to learning opportunities. It offers a wealth of enhanced resources that benefit both teachers and students alike (Asso, 2023). Beyond these advantages, technology integration can also help overcome various barriers specific to English language programs (Nicoletti et al., 2022). Moreover, incorporating technology into subject matter instruction helps students acquire essential computer and information technology skills (Langa & Bhatta, 2023). In turn, this promotes the use of information and communication technology as a valuable learning tool. Notably, for non-native speakers of English, the benefits are even more significant, as they use the language as an integral part of learning the technology (Reddick et al., 2020). Simultaneously, technology serves as a crucial tool for developing English language proficiency (Lythreatis et al., 2022).

One of the most significant contributions of computer-assisted tools is their ability to bring about remarkable improvements, particularly development of listening and reading skills. This, in turn, promotes competence in both basic communication and academic language (Zolfaghari et al., 2020). By integrating computers in an active and structured manner, students can engage in communicative interactions where they actively use language to support one another in comprehending texts, practicing language skills, and applying knowledge gained from the reading (Tewathia et al., 2020).

Journal of Education Innovation & Language Teaching (JEILT)
Peer-Reviewed Journal; Vol. 1, No. 1, pp53-75, 2025
ISSN:3080-4760 (Online); ISSN: 3080-0471 (Print)
DOI: https://doi.org/10.63381/jeilt.v1i1.38
https://jeilt.org
info@jeilt.org

Furthermore, engaging in dialogue through computer with fellow students or teachers allows students to gain valuable experience in communicating for authentic and meaningful reasons (see Reddick et al., 2020). At the same time, they receive genuine and constructive feedback, further enhancing their language skills (see Langa & Bhatta, 2023).

In addition, computers can be effectively employed to enrich the reading experience, improve the students' vocabulary, and enhance the reading comprehension. This can be achieved through interactive software that offers personalized instruction tailored to meet the unique needs and backgrounds of individual students (Coleman et al., 2020; Li et al., 2020). When it comes to speaking abilities, the computer can also be an invaluable resource. Specifically, it can provide training for more extensive speech, focusing on elements such as pronunciation, intonation, pitch, and fluency (Arakpogun et al., 2020). For example, the students can utilize the speech recognition software to engage in intensive pronunciation practice, enabling them to refine their spoken language skills effectively (see Eruchalu et al., 2021). Overall, incorporating technology into English language programs offers a wide array of benefits, fostering a more engaging and dynamic learning environment for students of all levels (Josef, 2021).

4.1 Innovative Pedagogical Approaches

For many years, teacher-centered pedagogical approaches have dominated English language teaching. In these classrooms, the teacher is the primary focus, while the students often passively listen and observe. The teacher controls the activities and dictates what is expected in exams (Mubarak et al., 2020). However, this approach can have the negative consequences, particularly for students with auditory or tactile learning preferences (see Lythreatis et al., 2022). Due to the emphasis on passive learning and visual elements, these students may struggle to absorb information effectively (Feng et al., 2023).

In addition to this, the process of traditional teaching and learning often encourages the rote memorization, which hinders students from developing critical thinking skills (Bevan, 2017; Huot et al., 2024). Unfortunately, students are frequently discouraged and penalized when they attempt to deviate from the predefined content or stylistic templates in their writing assessments. As a result, such practices further exacerbate their inability to think independently and creatively (see Zolfaghari et al., 2020). Given these challenges, it is evident that comprehensive transformation is necessary to align with the demands of the 21st-century students. Importantly, this transformation requires more than simply asking educators to take on the

Article-Review History:
Received: 2025-03-03; Revised: 2025-03-12; Accepted: 2025-03-20
About the Author:
Huot & Em

role of facilitators or to incorporate technology into their lessons (Asso, 2023). Instead, there is a pressing need for teachers who possess critical and creative thinking abilities themselves. To achieve this, these teachers must be trained in the principles and practices of universal design for learning concepts, which aim to provide equitable educational opportunities for all students, regardless of location (Helsper, 2021).

By embracing these concepts, insightful and creative teachers can empower themselves and their students to overcome the digital divide that exists today. With the integration of information and communication technology in instruction (Pearsall et al., 2021), these educators can bridge the gap and ensure equitable access to education worldwide (see Feng et al., 2023). In this digital age, investing in the future by closing the digital divide has become an imperative, underscored by the rise of strategic philanthropy (Aissaoui, 2021). Thus, it is essential to acknowledge the constraints and flaws of traditional teacher-centered pedagogy and adopt a more inclusive and dynamic approach to English language teaching (Dargin & Mostafavi, 2020). Transformation demands teachers who are not only well-informed but also adaptable and innovative. With guidance and support, students can develop the critical thinking skills while navigating the digital landscape. Ultimately, by investing in these innovative teaching practices, we can pave the way for a future where equitable education is a reality for all (Esteban et al., 2020).

4.2 Community Partnerships

Community partnerships play a crucial role in bridging the digital divide, providing valuable digital resources that enhance English language teaching and learning, particularly in the underserved areas (Karasik, 2019). These partnerships are highly adaptable, taking various forms to meet the unique needs of each community (Antonacopoulou, 2022). One of the most impactful forms of community collaboration is comprehensive professional development for educators. Instead of simply providing digital resources to students, this approach equips teachers with the skills and confidence to integrate information and communication technologies (ICTs) into their classrooms. By doing so, educators can better address the specific needs and challenges of their communities (Hennessy et al., 2022). In this model, higher education institutions work closely with experienced EFL instructor trainers, embarking on transformative journey to introduce and incorporate ICTs into local teaching methodologies (Tay et al., 2021). The ultimate goal is to empower educators, enabling them to harness the potential of digital tools to expand learning opportunities for students (Hammond, 2020).

The community partnerships can enhance teaching and learning through the paid internships. The corporations, looking to refine marketing strategies or development firms exploring cutting-edge ICT applications, can support these communities by financially investing in educators who utilize their products. This collaboration ensures that underserved communities remain at the forefront of technological advancements (Jain et al., 2020). As part of this initiative, community educators and corporate partners work together to conceptualize, design, and refine digital applications tailored to the specific needs of the community (Williamson, 2020; Dionisio & Vargas, 2022). These applications undergo rigorous testing and refinement before being released commercially, ensuring their effectiveness for both local and broader audiences (Heyer et al., 2021).

Similarly, the community service-learning projects in higher education can leverage ICTs to strengthen local economies. In this context, partnerships aim to integrate digital resources into various economic activities, fostering sustainability and prosperity. By doing so, higher education institutions not only support economic development but also equip community members with valuable digital skills for the modern workforce (Levkoe et al., 2018; Castro et al., 2020; Giesenbauer & Müller, 2020). Community partnerships serve as a cornerstone in addressing the digital divide and ensuring that no community is left behind. Through collaboration among higher education institutions, educators, corporations and development firms, the digital resources can be delivered effectively to physically and socioeconomically disadvantaged areas. Ultimately, embracing ICTs and fostering innovation foster the partnerships empower educators, expand learning opportunities, and lay the foundation for a more inclusive and digitally connected future.

5. Conclusion

Numerous studies have documented the profound educational and societal disparities caused by socioeconomic marginalization. Given this reality, the urgent challenge is to develop the sustainable and scalable solutions to counteract its historical effects. One promising approach is leveraging the mobile technology to bridge the digital divide in English language learning. By expanding access to technology-driven tools, marginalized learners have the opportunities to engage in education and communication, fostering the personal and academic growth. Mobile learning holds significant potential to reduce educational inequalities by providing effective English language instruction and unrestricted access to information on the World Wide Web. Beyond immediate benefits, research on mobile technology in education could inform broader policy discussions. For instance, the adapted SETT

framework could help educators advocate for the specific mobile tools by providing data-driven evidence of their effectiveness. By integrating this framework into policy discussions, decision-makers could be encouraged to prioritize mobile technology initiatives and develop long-term strategies to meet the growing demand for digital learning resources. Finally, fostering an open dialogue between marginalized communities, policymakers, and financial stakeholders is essential to achieving equitable access to digital tools. Even small-scale, well-planned interventions can yield significant results, bringing us closer to a future where all learners, regardless of socioeconomic status, have the digital resources they need to succeed.

Reference

Adwan, Samed, A. A., Albelbisi, N. A., Hujran, O., Al-Rahmi, W. M., & Alkhalifah, A. (2021). Developing a holistic success model for sustainable e-learning: A structural equation modeling approach. *Sustainability*, *13*(16), 1–25. https://doi.org/10.3390/su13169453

Aguilar, S. J. (2020). Guidelines and tools for promoting digital equity. *Information and Learning Sciences*, *121*(5/6), 285–299. https://doi.org/10.1108/ils-04-2020-0084

Aissaoui, N. (2021). The digital divide: a literature review and some directions for future research in light of COVID-19. *Global Knowledge, Memory and Communication*, *71*(8/9), 686–708. https://doi.org/10.1108/gkmc-06-2020-0075

Alharbi J. M. (2023). Insight into the role of interaction in language acquisition: Vygotsky's interactionist theory of language. *Arab World English Journal*, *14*(2), 281–294. https://doi.org/10.24093/awej/vol14no2.20

Antonacopoulou, E. P. (2022). Partnering for impact: A grand challenge and design for co-creating a just, resilient, and flourishing society. *The Journal of Applied Behavioral Science*, *58*(4), 571–594. https://doi.org/10.1177/00218863221113316

Appiah, k., Isaac, & Song, N. (2021). The impact of ICT on economic growth comparing rich and poor countries. *Telecommunications Policy*, *45*(2), 1–15. https://doi.org/10.1016/j.telpol.2020.102082

Arakpogun, E. O., Elsahn, Z., Nyuur, R. B., & Olan, F. (2020). Threading the needle of the digital divide in Africa: The barriers and mitigations of infrastructure sharing. *Technological Forecasting and Social Change*, 1–15. https://doi.org/10.1016/j.techfore.2020.120263

Asso, P. F. (2023). New perspectives on old inequalities: Italy's north–south divide. In D. D. Porta, M. Keating, & M. Pianta (Eds.), *Inequalities,*

territorial politics, nationalism (pp. 22–40). Routledge. https://doi.org/10.4324/9781003399773

Avanesian, G., Mizunoya, S., & Amaro, D. (2021). How many students could continue learning during COVID-19-caused school closures? Introducing a new reachability indicator for measuring equity of remote learning. *International Journal of Educational Development*, *84*, 1–8. https://doi.org/10.1016/j.ijedudev.2021.102421

Azlan, C. A., Wong, J. H. D., Tan, L. K., MSN, A. D. H., Ung, N. M., Pallath, V., Tan, C. P. L., Yeong, C. H., & Ng, K. H. (2020). Teaching and learning of postgraduate medical physics using Internet-based e-learning during the COVID-19 pandemic: A case study from Malaysia. Physica Medica, *80*, 10–16. https://doi.org/10.1016/j.ejmp.2020.10.002

Benitez, G. B., Ayala, N. F., & Frank, A. G. (2020). Industry 4.0 innovation ecosystems: An evolutionary perspective on value cocreation. *International Journal of Production Economics*, *228,* 1–13. https://doi.org/10.1016/j.ijpe.2020.107735

Betancur, L., Miller, P., & Votruba-Drzal, E. (2024). Urban-rural achievement gap in low- and middle-income countries: The role of early childhood education. *Early Childhood Research Quarterly*, *66*, 11–23. https://doi.org/10.1016/j.ecresq.2023.08.008

Bevan, S. R. (2017). *Thinking culturally about critical thinking in Cambodia* [Doctoral dissertation]. London South Bank University.

Biletska, I. O., Paladieva, A. F., Avchinnikova, H. D., & Kazak, Y. Y. (2021). Use of modern technologies by foreign language teachers: Developing digital skills. *Linguistics and Culture Review*, *5*(S2), 16–27. https://doi.org/10.21744/lingcure.v5nS2.1327

Bond, M., Bedenlier, S., Marin, V. I., & Handel, M. (2021). Emergency remote teaching in higher education: Mapping the first global online semester. *Int J Educ Technol High Educ*, *18*(1), 1–24. https://doi.org/10.1186/s41239-021-00282-x

Bowen, K., Barry, M., Jowell, A., Maddah, D., & Alami, N. H. (2021). Virtual exchange in global health: An innovative educational approach to foster socially responsible overseas collaboration. *Int J Educ Technol High Educ*, *18*(1), 1–11. https://doi.org/10.1186/s41239-021-00266-x

Bozkurt, A., Jung, I., Xiao, J., Vladimirschi, V., Schuwer, R., Egorov, G., Lambert, S., Al-Freih, M., Pete, J., & Olcott Jr, D. (2020). A global outlook to the interruption of education due to COVID-19

pandemic: Navigating in a time of uncertainty and crisis. *Asian Journal of Distance Education*, *15*(1), 1–126. https://www.asianjde.com/ojs/index.php/AsianJDE/article/view/462

Broadbent, J., Panadero, E., Lodge, J. M., de , & Barba, P. (2000). Technologies to enhance self-regulated learning in online and computer-mediated learning environments. In M. J. Bishop, E. Boling, J. Elen, & V. Svihla (Eds.), *Handbook of Research in educational communications and technology*. Springer, Cham. https://doi.org//10.1007/978-3-030-36119-8_3

Buchholz, B. A., DeHart, J., & Moorman, G. (2020). Digital citizenship during a global pandemic: Moving beyond digital literacy. *J Adolesc Adult Lit*, *64*(1), 11–17. https://doi.org/10.1002/jaal.1076

Burbules, N. C., Fan, G., & Repp, P. (2020). Five trends of education and technology in a sustainable future. *Geography and Sustainability*, *1*(2), 93–97. https://doi.org/10.1016/j.geosus.2020.05.001

Burdujan, R. (2024). The potential of task-based language learning (TBL) in an interdisciplinary context. *Acta et Commentationes: Științe Ale Educației*, *35*(1), 127–135. https://doi.org/10.36120/2587-3636.v35i1.127-135

Castro , L. M. B., 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 (Basel)*, *20*(11), 1–22. https://doi.org/10.3390/s20113291

Cenoz, J., & Gorter, D. (2020). Teaching English through pedagogical translanguaging. *World Englishes*, *39*(2), 300–311. https://doi.org/10.1111/weng.12462

Chang, A. M. (2018). *Lean impact: How to innovate for radically greater social good*. John Wiley & Sons. https://cir.nii.ac.jp/crid/1130282271612023424

Christison, M., & Murray, D. E. (2021). *What English language teachers need to know Volume III: Designing curriculum*. Routledge. https://doi.org/10.4324/9780429275746

Coleman, N., Esmalian, A., & Mostafavi, A. (2020). Equitable resilience in infrastructure systems: Empirical assessment of disparities in hardship experiences of vulnerable populations during service disruptions. *Natural Hazards Review*, *21*(4), 1–13. https://doi.org/10.1061/(asce)nh.1527-6996.0000401

Correia, A.-P. (2020). Healing the digital divide during the COVID-19 pandemic. *Quarterly Review of Distance Education*, *21*(1), 13–21.

https://research.ebsco.com/linkprocessor/plink?id=1aa00acb-724c-3afb-8492-f43713a16141

Dargin, J. S., & Mostafavi, A. (2020). Human-centric infrastructure resilience: Uncovering well-being risk disparity due to infrastructure disruptions in disasters. *PLoS One*, *15*(6), 1–18. https://doi.org/10.1371/journal.pone.0234381

Dias, M. J. A., Almodóvar, M., Atiles, J. T., Vargas, A. C., & Zúñiga León, I. M. (2020). Rising to the challenge: Innovative early childhood teachers adapt to the COVID-19 era. *Childhood Education*, *96*(6), 38–45. https://doi.org/10.1080/00094056.2020.1846385

Dionisio, d. M., & Vargas, E. R. (2022). Integrating corporate social innovations and cross-collaboration: An empirical study. *Journal of Business Research*, *139*, 794–803. https://doi.org/10.1016/j.jbusres.2021.09.039

Ejaz, N., & Mallawaarachchi, T. (2023). Disparities in economic achievement across the rural–urban divide in Pakistan: Implications for development planning. *Economic Analysis and Policy*, *77*, 487–512. https://doi.org/10.1016/j.eap.2022.11.023

Em, S. (2021). Challenges of online learning during the COVID-19 pandemic: A survey of Cambodian high school students. *Cambodian Journal of Educational Research*, *1*(2), 96-108. https://doi.org/10.62037/cjer.2021.01.02.09

Em, S. (2022). Challenges of English language learning and teaching in Cambodia: A case study of Kith Meng Brasat High School. *Cambodian Journal of Educational Research*, *2*(1), 62-80. https://doi.org/10.62037/cjer.2022.02.01.04

Em, S. (2023). Cambodian students' online learning challenges during the COVID-19 pandemic: A vision for future measures. *International Journal of Cambodian Education*, *1*(1), 1-5.

Em, S., Chau, L., Ros, R., Dy, P., Pen, D., & Chin, P. (2024). Encouraging English language reading in Cambodia: A case study of Takeo provincial higher educational institutions. *Journal of General Education and Humanities*, *3*(2), 85-102. https://doi.org/10.58421/gehu.v3i2.205

Eruchalu, C. N., Pichardo, M. S., Bharadwaj, M., Rodriguez, C. B., Rodriguez, J. A., Bergmark, R. W., Bates, D. W., & Ortega, G. (2021). The expanding digital divide: Digital health access inequities during the COVID-19 pandemic in New York City. *Journal of Urban Health*, *98*(2), 183–186. https://doi.org/10.1007/s11524-020-00508-9

Esteban, N., Miguel-Ángel, García-Madurga, M.-Á., Morte-Nadal, T., & Nogales-Bocio, A.-I. (2020). The rural digital divide in the face of the COVID-19 pandemic in Europe: Recommendations from a scoping review. *Informatics*, *7*(4), 1-18. https://doi.org/10.3390/informatics7040054

Feng, Y., Hu, J., Afshan, S., Irfan, M., Hu, M., & Abbas, S. (2023). Bridging resource disparities for sustainable development: A comparative analysis of resource-rich and resource-scarce countries. *Resources Policy*, *85*. https://doi.org/10.1016/j.resourpol.2023.103981

Fishman, J. A. (2020). Who speaks what language to whom and when? In L. Wei (Ed.), The bilingualism reader (pp. 55–70). Routledge. https://doi.org/10.4324/9781003060406

Fuller, J. A., Luckey, S., Odean, R., & Lang, S. N. (2021). Creating a diverse, inclusive, and equitable learning environment to support children of color's early introductions to STEM. *Translational Issues in Psychological Science*, *7*(4), 473–486. https://doi.org/10.1037/tps0000313

Giesenbauer, B., d, & Müller, C. G. (2020). University 4.0: Promoting the transformation of higher education institutions toward sustainable development. *Sustainability*, *12*(8), 1–27. https://doi.org/10.3390/su12083371

Haleem, A., Javaid, M., Qadri, M. A., & Suman, R. (2022). Understanding the role of digital technologies in education: A review. *Sustainable Operations and Computers*, *3*, 275–285. https://doi.org/10.1016/j.susoc.2022.05.004

Hamamouche, K., & Bohannon, J. N. (2022). Theoretical approaches to language acquisition. In J. B. Gleason & N. B. Ratner (Eds.), *The Development of Language* (pp. 209–250). Plural Publishing, Inc. https://publikationen.ub.uni-frankfurt.de/frontdoor/index/index/docId/20021

Hambly, H., & Rajabiun, R. (2021). Rural broadband: Gaps, maps and challenges. *Telematics and Informatics, 60,* 1–18. https://doi.org/10.1016/j.tele.2021.101565

Hammond, L. D. (2020). Accountability in teacher education. *Action in teacher education*, *42*(1), 60–71. https://doi.org/10.1080/01626620.2019.1704464

Hazaea, A. N., Bin-Hady, W. R. A., & Toujani, M. M. (2021). Emergency remote English language teaching in the Arab league countries: Challenges

and remedies. *Computer-Assisted Language Learning Electronic Journal*, *22*(1), 207–229.

Helsper, E. (2021). The digital disconnect: The social causes and consequences of digital inequalities. *Sage Publications*. https://www.torrossa.com/en/resources/an/5019480

Henderson, A., & Jones, R. W. (2021). *Englishness: The political force transforming Britain*. Oxford University Press. https://doi.org/10.1093/oso/9780198870784.001.0001

Henderson, A., & Jones, R. W. (2021). Englishness: The political force transforming Britain. *Computers and Education Open*, *3*, 1–32. https://doi.org/10.1016/j.caeo.2022.100080

Heng, K., Sol, K., & Em, S. (2022). COVID-19 and digital transformation of Cambodian higher education: Opportunities, challenges, and the way forward. In P. Ordóñez de Pablos & M. N. Almunawar (Eds.), *Handbook of research on education institutions, skills, and jobs in the digital era* (pp. 307–327). IGI Global. https://doi.org/10.4018/978-1-6684-5712-3.ch016

Heyer, D. M., Smith, E., & Irving, C. (2021). Tracing the link between transformative education and social action through stories of change. *Journal of Transformative Education*, *19*(4), 421–432. https://doi.org/10.1177/15413446211045165

Huot, S., Hok, C., Kumar, P., & Heng, L. (2024). Exploring the benefits of teacher involvement in guiding high school students' orientation toward personal and educational growth. *Cambodian Journal of Educational and Social Sciences (CJESS)*, *1*(1), 49–66. https://doi.org/10.69496/cjess.v1i1.9

Jain, S., Lall, M., & Singh, A. (2020). Teachers' voices on the impact of COVID-19 on school education: Are ed-tech companies really the panacea? *Contemporary Education Dialogue*, *18*(1), 58–89. https://doi.org/10.1177/0973184920976433

Jakubiak, C. (2019). "English is out there: You have to get with the program": Linguistic instrumentalism, global citizenship education, and English-language voluntourism. *Anthropology & Education Quarterly*, *51*(2), 212–232. https://doi.org/10.1111/aeq.12332

Jamil, S. (2021). From digital divide to digital inclusion: Challenges for wide-ranging digitalization in Pakistan. *Telecommunications Policy*, *45*(8), 1–16. https://doi.org/10.1016/j.telpol.2021.102206

Josef, M. K.-H. (2021). The digital divide at school and at home: A comparison between schools by socioeconomic level across 47 countries.

International Journal of Comparative Sociology, *62*(2), 115–140. https://doi.org/10.1177/00207152211023540

Karaman, h. A., Nada, Ježić, Z., & Zaninović, P. A. (2021). The effects of information and communication technology (ICT) use on human development: A macroeconomic approach. *Economies*, *9*(3), 1–12. https://doi.org/10.3390/economies9030128

Karasik, R. J. (2019). Community partners' perspectives and the faculty role in community-based learning. *Journal of Experiential Education*, *43*(2), 113–135. https://doi.org/10.1177/1053825919892994

Koch, K. (2022). The territorial and socio-economic characteristics of the digital divide in Canada. *Canadian Journal of Regional Science*, *45*(2), 89–98. https://doi.org/10.7202/1092248ar

Kumari, R., & Singh, S. K. (2023). Impact of ICT infrastructure, financial development, and trade openness on economic growth: New evidence from low- and high-income countries. *Journal of the Knowledge Economy*, *15*(2), 7069-7098. https://doi.org/10.1007/s13132-023-01332-7

Kwee, C. T. T. (2021). I want to teach sustainable development in my English classroom: A case study of incorporating sustainable development goals in English teaching. *Sustainability*, *13*(8), 1–24. https://doi.org/10.3390/su13084195

Langa, N., & Bhatta, T. (2023). Correction: The rural-urban divide in Tanzania: Residential context and socioeconomic inequalities in maternal health care utilization. *PLoS One*, *18*(7), 1–11. https://doi.org/10.1371/journal.pone.0288419

Latorre, Cosculluela, C., Suárez, C., Quiroga, S., Sobradiel-Sierra, N., Lozano-Blasco, R., & Rodríguez-Martínez, A. (2021). Flipped classroom model before and during COVID-19: Using technology to develop 21st century skills. *Interactive Technology and Smart Education*, *18*(2), 189–204. https://doi.org/10.1108/itse-08-2020-0137

Levkoe, C. Z., Friendly, A., & Daniere, A. (2018). Community service-learning in graduate planning education. *Journal of Planning Education and Research*, *40*(1), 92–103. https://doi.org/10.1177/0739456x18754318

Li, R., Chen, K., & Wu, D. (2020). Challenges and opportunities for coping with the smart divide in rural America. *Annals of the American Association of Geographers*, *110*(2), 559–570. https://doi.org/10.1080/24694452.2019.1694402

Liu, Z.-J., Tretyakova, N., Fedorov, V., & Kharakhordina, M. (2020). Digital literacy and digital didactics as the basis for new learning models development. *International Journal of Emerging Technologies in Learning (iJET)*, *15*(14), 1–15. https://doi.org/10.3991/ijet.v15i14.14669

Lythreatis, S., Singh, S. K., & El-Kassar, A.-N. (2022). The digital divide: A review and future research agenda. *Technological Forecasting and Social Change*, *175,* 1–11. https://doi.org/10.1016/j.techfore.2021.121359

Marginson, S., & Xu, X. (2023). Hegemony and inequality in global science: Problems of the center-periphery model. *Comparative Education Review*, *67*(1), 31–52. https://doi.org/10.1086/722760

Martínez, D., Marlen, & aMora-Rivera, J. (2020). Internet adoption and usage patterns in rural Mexico. *Technology in Society*, *60*, 1–10. https://doi.org/10.1016/j.techsoc.2019.101226

Mazzotti, V. L., Rowe, D. A., Kwiatek, S., Voggt, A., Chang, W.-H., Fowler, C. H., Poppen, M., Sinclair, J., & Test, D. W. (2020). Secondary transition predictors of postschool success: An update to the research base. *Career Development and Transition for Exceptional Individuals*, *44*(1), 47–64. https://doi.org/10.1177/2165143420959793

Meng-yue, C., Dan, L., & Jun, W. (2020). A Study of College English Culture Intelligence-Aided Teaching System and Teaching Pattern. *English Language Teaching*, *13*(3), 77–83. https://doi.org/10.5539/elt.v13n3p77

Miller, B. T., Camarda, A., Mercier, M., Burkhardt, J. M., Morisseau, T., Bourgeois-Bougrine, S., Vinchon, F., El Hayek, S., Augereau-Landais, M., Mourey, F., Feybesse, C., Sundquist, D., & Lubart, T. (2023). Creativity, critical thinking, communication, and collaboration: Assessment, certification, and promotion of 21st century skills for the future of work and education. *Journal of Intelligence*, *11*(3), 1–32. https://doi.org/10.3390/jintelligence11030054

Mongelli, F., Georgakopoulos, P., & Pato, M. T. (2020). Challenges and opportunities to meet the mental health needs of underserved and disenfranchised populations in the United States. *focus.psychiatryonline.org*, *18*(1), 16–24. https://doi.org/10.1176/appi.focus.20190028

Monje, J. D., Orbeta Jr, A. C., Francisco, K. A., & Capones, E. M. (2021). 'Starting where the children are': Process evaluation of the mother

tongue-based multilingual education program implementation. *Research Paper Series*, *2*, 1–81.

Morita, M. T., Renn, J., & Chiu, M. M. (2020). Obscuring equity in dual language bilingual education: A longitudinal study of emergent bilingual achievement, course placements, and grades. *TESOL Quarterly*, *54*(3), 685–718. https://doi.org/10.1002/tesq.592

Mubarak, F., Suomi, R., & Kantola, S.-P. (2020). Confirming the links between socio-economic variables and digitalization worldwide: the unsettled debate on digital divide. *Journal of Information, Communication and Ethics in Society*, *18*(3), 415–430. https://doi.org/10.1108/jices-02-2019-0021

Nicoletti, L., Sirenko, M., & Verma, T. (2022). Disadvantaged communities have lower access to urban infrastructure. *Environment and Planning B: Urban Analytics and City Science*, *50*(3), 831–849. https://doi.org/10.1177/23998083221131044

Pearsall, H., Gutierrez-Velez, V. H., Gilbert, M. R., Hoque, S., Eakin, H., Brondizio, E. S., Solecki, W., Toran, L., Baka, J. E., Behm, J. E., Brelsford, C., Hinrichs, C., Henry, K. A., Mennis, J., Roman, L. A., Rosan, C., South, E. C., & Valletta, R. D. (2021). Advancing equitable health and well-being across urban–rural sustainable infrastructure systems. *npj Urban Sustainability*, *1*(26), 1–6. https://doi.org/10.1038/s42949-021-00028-8

Qureshi, S. (2021). Pandemics within the pandemic: Confronting socio-economic inequities in a datafied world. *Information Technology for Development*, *27*(2), 151–170. https://doi.org/10.1080/02681102.2021.1911020

Reddick, C. G., Enriquez, R., Harris, R. J., & Sharma, B. (2020). Determinants of broadband access and affordability: An analysis of a community survey on the digital divide. *Cities*, *106*, 1–12. https://doi.org/10.1016/j.cities.2020.102904

Rich, M. J., & Pather, S. (2020). A response to the persistent digital divide: Critical components of a community network ecosystem. *Information Development*, *37*(4), 558–578. https://doi.org/10.1177/0266666920924696

Roberts, C. A. (2022). *Assessing Multilingual Collection Development for High School English Language Learners* [Master's degree, University of North Carolina]. Chapel Hill, North Carolina.

Robinson, L., Schulz, J., Blank, G., Ragnedda, M., Ono, H., Hogan, B., Mesch, G. S., Cotten, S. R., Kretchmer, S. B., Hale, T. M., Drabowicz, T., Yan,

P., Wellman, B., Harper, M.-G., Quan-Haase, A., Dunn, H. S., Casilli, A. A., Tubaro, P., Carvath, R., & Khilnani, A. (2020). Digital inequalities 2.0: Legacy inequalities in the information age. *First Monday*, *25*(7), 1–27. https://doi.org/10.5210/fm.v25i7.10842

Rose, H., McKinley, J., & Galloway, N. (2020). Global Englishes and language teaching: A review of pedagogical research. *Language Teaching*, *54*(2), 157–189. https://doi.org/10.1017/s0261444820000518

Rubach, C., & Lazarides, R. (2021). Addressing 21st-century digital skills in schools: Development and validation of an instrument to measure teachers' basic ICT competence beliefs. *Computers in Human Behavior*, *118,* 1–17. https://doi.org/10.1016/j.chb.2020.106636

Sanders, C. K., & Scanlon, E. (2021). The Digital Divide Is a Human Rights Issue: Advancing Social Inclusion Through Social Work Advocacy. *J Hum Rights Soc Work*, *6*(2), 130–143. https://doi.org/10.1007/s41134-020-00147-9

Selvi, A. F., & Yazan, B. (2021). *Language teacher education for global Englishes: A practical resource book*. Routledge. https://cir.nii.ac.jp/crid/1130007115429470337

Shohel, M. M. C., Shams, S., Ashrafuzzaman, M., Alam, A. S., Al Mamun, M. A., & Kabir, M. M. (2022). Emergency remote teaching and learning: Digital competencies and pedagogical transformation in resource-constrained contexts. In D. R. Rasiah (Ed.), *Handbook of research on Asian perspectives of the educational impact of COVID-19* (pp. 175–200). IGI Global. https://doi.org/10.4018/978-1-7998-8402-6.ch011

Sok, S., & Bunry, R. (2023). Higher education in Cambodia. In L. P. Symaco & M. Hayden (Eds.), *International handbook on education in South East Asia* (pp. 1–24). Springer. https://doi.org/10.1007/978-981-16-8136-3_47-1

Tang, C. S. (2022). Innovative technology and operations for alleviating poverty through women's economic empowerment. *Production and Operations Management*, *31*(1), 32–45. https://doi.org/10.1111/poms.13349

Tavakol, M., & Tavakoli, M. (2023). Teaching English to young learners in private sector of Iranian ELT: Challenges and local realities. *International Journal of Applied Linguistics*, *33*(2), 105–131. https://doi.org/10.1111/ijal.12453

Tavares, V. (2021). Essentials for Successful English Language Teaching. *TESL Canada Journal*, *38*(1), 99–101. https://doi.org/10.18806/tesl.v38i1.1349

Tay, L. Y., Ramachandran, K., Ong, W. L. M., & Towndrow, P. A. (2021). Empowerment through distributed leadership in reconciling tensions and dilemmas in teacher professional development. *Teacher Development*, *25*(5), 647–668. https://doi.org/10.1080/13664530.2021.1939133

Taylor, D. (2024). Political Identity in South Asia. In D. Taylor & M. Yapp (Eds.), *Political identity in South Asia* (pp. 255–266). Routledge. https://doi.org/10.4324/9781032715575

Tewathia, N., Kamath, A., & Ilavarasan, P. V. (2020). Social inequalities, fundamental inequities, and recurring of the digital divide: Insights from India. *Technology in Society*, *61,* 1–11. https://doi.org/10.1016/j.techsoc.2020.101251

Vai, V., Cecile Alvarez Herault, M., Raison, B., & Bun, L. (2020). Optimal low-voltage distribution topology with integration of PV and storage for rural electrification in developing countries: A case study of Cambodia. *Journal of Modern Power Systems and Clean Energy*, *8*(3), 531–539. https://doi.org/10.35833/mpce.2019.000141

Vassilakopoulou, P., & Hustad, E. (2023). Bridging digital divides: A Literature review and research agenda for information systems research. *Inf Syst Front*, *25*(3), 955-969. https://doi.org/10.1007/s10796-020-10096-3

Waheed, Z., Abdul, W., & Waheed, B. (2020). Perception of future teachers about mother tongue education in Brahui language at primary level. *Al-Burz*, *12*(1), 24–29. https://doi.org/10.54781/abz.v12i1.47

Williamson, B. (2020). Making markets through digital platforms: Pearson, edu-business, and the (e)valuation of higher education. *Critical Studies in Education*, *62*(1), 50–66. https://doi.org/10.1080/17508487.2020.1737556

Ye, L., & Yang, H. (2020). From digital divide to social inclusion: A tale of mobile platform empowerment in rural areas. *Sustainability*, *12*(6), 1–16. https://doi.org/10.3390/su12062424

Zolfaghari, M., Kabiri, M., & Saadatmanesh, H. (2020). Impact of socio-economic infrastructure investments on income inequality in Iran. *Journal of Policy Modeling*, *42*(5), 1146–1168. https://doi.org/10.1016/j.jpolmod. 2020.02.004lmod.2020.02.004

Journal of Education Innovation & Language Teaching (JEILT)
Peer-Reviewed Journal; Vol. 1, No. 1, pp76-87, 2025
ISSN:3080-4760 (Online); ISSN: 3080-0471 (Print)
DOI: https://doi.org/10.63381/jeilt.v1i1.52
https://jeilt.org
info@jeilt.org

Teachers' Challenges in Transforming the Digital Teaching in Cambodian Context

Vanna Ourn[1]*, Than Chhorn (PhD)[2]

1* Corresponding author: Air Accident Investigation Unit (AAIU), State Secretariat of Civil Aviation, ournvanna31@gmail.com
2. National Institute of Education (NIE), chhornthan1984@gmail.com

To cite this article: 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

Abstract

This research addresses the challenges that teachers faced in the digital teaching process, with a focus on the digitalization of teaching. Digital transformation has challenged the teachers to guarantee the teaching quality. While the fast digitalization has handlined in the era of COVID 19 teaching, the challenges have been occurring for teachers to carry out the teaching process. To find out the teachers' challenge in digital teaching, this study used the quantitative research method. The results of this research showed that digitalization made teachers challenged in teaching. This was a mean of digital knowledge, competence, and skills to process teaching. However, this offered the views on challenges of digital teaching transformation, determinants to challenge the digital teaching, trends of transforming the digital teaching, and challenges with digital teaching materials. In brief, this study significantly contributed the key perspectives of digital teaching to deal with the challenges in digital teaching.

Keywords: *Digital teaching; Transforming; Challenge; Digitalization; Digital skill, Competence*

1. Introduction

Transforming the digital teaching makes teachers faced the challenges in the Cambodian context. The education system in Cambodia has set the provision of excellent quality education for the students not only in Cambodia, but also worldwide (Auh & Jeung, 2021; Lee, 2021). Digitalization of teaching and learning is deeply involved in development of education quality and quality advancement of teaching and learning outcomes. Otherwise, academic or educational institutions reaches out to their potential students in the world and collaborates with emerging global academic or educational stakeholders using ICT for online and offline teaching and learning that plays a meaningful role in developing education community (Bae, 2021). In the wide spectrum of globalization and localization, digitization has been expedited by COVID-19 and engendered diverse changes related to teaching and learning process in the educational context of Cambodia.

Article-Review History:
Received: 2025-02-27; Revised: 2025-03-19; Accepted: 2025-03-25

The recent study addresses the important challenges of transforming digital teaching in the case of Cambodian education – focusing on digitization of teaching. Digital education transformation has factually impacted teaching and learning in Cambodian education institutions. First, this recent study is to describe the digital trends for the teachers who have practiced digital teaching, reflecting the digital education policies, as well as specific cases studies. Second, this current research is to provide arguments of challenges of transforming digital teaching in Cambodian education institutions. While practicing the learner-collaborated, the issues, as such a competency gap of instructors' digital teaching and deepening digital divide among all learners, are emerging the need.

2. The Rationales of Digital Teaching Transformation

2.1 Challenges in Digital Teaching Transformation

Digitization in teaching transformation was complex to enhance education quality, particularly quality of teaching and learning, which offered insight for distance, blended and collaborative teaching and learning (OECD, 2017). The digital education system and online teaching content were central as the challenges for Cambodian education institutions to gradually increase in the instructional advancement, increased diversity, and openness in academic institutions. Cyber was about the web platform that helped teachers change from the traditional teaching methods into digital teaching methods (Park, 2006). The COVID-19 pandemic was a key phase in digitizing education instructions (Kalenzi et al., 2020). The change in digital teaching and learning has been carried forward in line with Cambodia's nation education strategy, focused on the digital transformation of teaching (Ministry of Education [ME], 2021).

Digital teaching Transformation was challenged to process digital technology in teaching and learning (MoEYS, 2023). Digital teaching was defined as a potential factor for teaching quality, as well as development of teaching-method and achievement of standardized learning outcomes. In addition, the policy of digital teaching transformation was the purpose to develop the digital human recourses and education (Supreme National Council [SNC], 2021). Digital teaching was a response to teacher training reform, and it was a process of transforming education through digital technology in reaching the improvement of education quality and digital capacity, skill, and literacy in teaching (Hang-chuon, 2021). Further, replacing the digital device into education system was about the reform teaching and learning to increase the human resources with digital skills and to streamline the teaching and learning quality.

Article-Review History:
Received: 2025-02-27; Revised: 2025-03-19; Accepted: 2025-03-25
About the Author:
Ourn & Than

Integrating the digital technology was one of the challenges in transforming teaching and learning meet the insight of how teaching (Dirk et al., 2021). The digital devices that were transformed to reform traditional education into digital education, was a concern with development of digital teaching (Taşkıran, 2017). Digital technology was one of the troubles for teachers to connected teaching to Internet and provided data through web platforms of rich teaching-materials (Paunescu et al., 2022). On the other hand, digital teaching transformation focused on the technology use in the teaching-course regeneration (Forrester, 2016; IDC, 2015). Some researchers (e.g., OECD, 2017; Raab & Griffin-Cryan, 2011) pointed out that digital teaching was the process of digital creation and re-enactment of teaching analogue. Digital transformation of academic institutions was part of digital process in affected education, such as teaching and learning environment (NV, 2017). With studies confirmed by Balyer and Öz (2018), transformation of digital teaching was a challenged framework for education system to develop the teaching quality and teaching methods.

2.2 Determinants Challenging Digital Teaching

Digital teaching was challenged with determinants, such digital knowledge, digital competence, digital comprehension, digital literacy, and digital skills. In this case, the digital technology was central as the challenge in the digital education contexts throughout the world (McCarthy et al., 2023). In the era of (COVID-19) pandemic, the academic institutions prompted an explosion in remote teaching and learning (Al-Lily et al., 2020; Christensen & Alexander, 2020). This was a mean of changing how to perceive, work, teach, and learn with digital transformation (Di-Pietro et al., 2020; Trust et al., 2020). Further, Negreiro and Madiega (2019) identified a digital transformation as what to change with the unprecedented speed, which was exemplified by the global impact of digital technology developments, as such artificial intelligence (AI) (Pedr´o et al., 2019; Sinclair et al., 2018), metadata management (Neri, 2019), and citizenship with digital technology (Pedersen et al., 2018). By responding to the era of COVID-19 pandemic, academic institutions needed to rethink of digital education transformation, replace digital classroom, and practice teaching and learning with online and distance education (Li & Lalani, 2020; Perisic, 2018).

Digital competence was the challenge for teachers to carry out the digital teaching (Parlak, 2017). However, it was a challenge for the teachers to use technologies in managing and sharing data/information, and to use ICT in processing the teaching (Dirk et al., 2021). Digital transformation profoundly affected on the teaching, which was a framework for the teacher-training

reform and the development of the digital teaching quality (Balyer & Öz, 2018). Literacy of digital technology was a trouble for teachers transform the digital teaching, as such Internet-platform teaching, social-media teaching, and electronic device teaching (Bates, 2015; Kim, 2023; Hang-chuon, 2024). This was a mean of the digital literacy that was a vital skill for 21st century education, with the contributions to the out-of-school and lifelong learning (Sisman (2016). Digital transformation involved individual need for teachers to develop teaching methods (Paulo, 2020; Silva, 2017; Yureva et al., 2020) and digital skills, i.e., ICT soft-skills (Alenezi, 2021).

2.3 Trends of Transforming the Digital Teaching

While education system embraced digital technologies, the uptake of digital transformational change outpaced the uptake of digital change in education system (OECD, 2019a, 2019b). Digital teaching helped the students access to new technologies outside the classroom (van der Vlies, 2020). Schleicher (2018) argued that without changing the substantial, gap between education system and policy was likely to widen, responding to digital education and cultural changes (Habibi & Zabardast, 2020; OECD, 2019c, 2019d). For this reason, digital teaching transformation was used as a change by developing digital thinking and using digital frameworks allowed academic/educational institutions to manage the digital teaching initiatives and approaches (Silva, 2017). Digitalization was a vital aspect in developing the teaching strategy for digital education systems, facilitating digital teaching, controlling the ICT use in teaching, and creating the digital teaching infrastructure in education, as such Internet access, digital tools (Paulo, 2020).

Lifelong education provided the opportunities for educational institutions to reform the education policy and system, digitalize education, better teaching and learning, standardize learning outcomes, advance teacher-professional training, and digitalize human resource (Hang-chuon, 2021; MoEYS, 2023). Education policy was enacted as a form of having cooperation among government, educational institutions, and other stakeholders, which helped enhance the sustainability drive in boosting education quality (MoEYS, 2024). This line of digital education practices in academic/educational institutions can categorize with four keywords – digitalization, digital education quality, digital teaching, and learning outcomes. The vision for academic institutions was linked to process digitalization in line with the trends of digital teaching transformation (Yureva et al., 2020). With the digitalization of teaching, the educational institutions embraced the new technologies and changed the teaching practices. In this sense, digital transformation was a testament to

Article-Review History:
Received: 2025-02-27; Revised: 2025-03-19; Accepted: 2025-03-25

advance the effective methods and practices in pursuing the in terms to develop teaching quality (Alenezi, 2021).

MoEYS's policy focused on investment in academic institutions for research and digital education and educating people with digital skills (Lee, 2022). These policies encouraged teachers to support students' learning outcomes with provision of opportunities to digitalize the learning methods. Naturally, changes in academic institutions toward lifelong learning institutions was actively pursued (Choi et al., 2018). With this active policy, the academic institutions were being transformed to include the lifelong learners, i.e., digitalized students (NILE, 2022a). According to analysis on digitization in administrative services by OECD (2016), digital teaching and learning was developed with insight of distance, blended and collaborative teaching and learning. The prominent changes in academic institutions in this aspect was the emergence of remote teaching and learning with cyber program (Park, 2006). Digitalization was a key in introducing academic instruction into the entire school digital-system (Kalenzi et al., 2020). The change in digitalized teaching and learning was carried forward in line with Cambodia's national strategy, focused on the digital education transformation (MoEYS, 2019).

3. Critical Analysis of Digital Teaching Challenges

3.1 Digitalization Taking the Teaching Challenges

Digitalization is one of the most technological transformations, in which it is defined as a challenge in education. Fast digitalization makes teachers face the trouble in teaching, as such e-teaching software that is used for digital teaching transformation (Di-Pietro et al., 2020). In this situation, computers, smartphones, tablets, and/or others media-apps are the digital technologies that serve the digital teaching. This is a mean of teaching needs the digital transformation in distance teaching and learning (Ponti et al., 2017). In the era of COVID-19 pandemic, the students worldwide experienced learning disruption (Giannini, 2020).

With the report by Global Education Monitoring Report (2020), there has been the accentuation of equity disparity in the school systems that access education with the online and distance teaching. Transitioning to distance teaching with online-teaching platforms do not access to Internet for home-learning (Giannini, 2020; UNESCO, 2020a, b). Digital transforming is about the technological change in the modernization era, digitalizing teaching process with the use of technology. Facilitating the teaching process with technology gets the teachers be in the troubles to develop the teaching methods, quality, and insurance of effective teaching. Transformation of digital teaching makes teachers and learners have the troubles with digital

Journal of Education Innovation & Language Teaching (JEILT)
Peer-Reviewed Journal; Vol. 1, No. 1, pp76-87, 2025
ISSN:3080-4760 (Online); ISSN: 3080-0471 (Print)
DOI: https://doi.org/10.63381/jeilt.v1i1.52
https://jeilt.org
info@jeilt.org

competence, skills, and literacy. This means that ability, skills, and literacy of digitalization in teaching is the key aspect for teachers to process teaching.

3.2 Teaching Challenges with Digital Competence, Skill, and Literacy

Teaching is challenged with digital competence and skills (Al-Lily et al., 2020; Christensen & Alexander, 2020; McCarthy et al., 2023), as such distance teaching and e-teaching. This was a mean of changing how to teach with the digitalization (Di-Pietro et al., 2020; Negreiro & Madiega, 2019; Trust et al., 2020), referred to the remote teaching. Digital competence is identified as a digital factor (Pedr´o et al., 2019; Sinclair et al., 2018), which made teachers be in trouble with the teaching, impacted distance teaching (Neri, 2019), digitalization of citizenship (Pedersen et al., 2018), and digital thinking in education, digital classroom, and distance education (Li & Lalani, 2020; Perisic, 2018), as such distance teaching. In the context of Cambodia, many teachers have faced the challenges with the digital competence in teaching process (Parlak, 2017), use of technologies and ICT in processing the remote teaching (Dirk et al., 2021). Digital transformation profoundly affected on the teaching competence (Balyer & Öz, 2018) – reforming the teacher-training and teaching quality. Ultimately, Digital competence (Parlak, 2017) is a part of digital teaching that helps teachers better the teaching methods.

Digital skill is central as the skill which the teachers transformed for teaching (Paulo, 2020; Silva, 2017; Yureva et al., 2020). Digital skill refers to the ICT soft-skill (Alenezi, 2021) that serves the process of digital teaching. Digital transformation is a digital technology evolving to contribute to development of digital human resources. However, digital literacy in teaching is concerned with understanding of using digital technology in teaching, as such internet-platform teaching and social-media teaching (Bates, 2015; Kim, 2023; Hang-chuon, 2024). This meant that digital literacy is a vital skill for 21st century education, contributed the lifelong learning (Sisman (2016).

Digital transformation has had a profound effect on the digital teaching (Balyer & Öz, 2018), such as facilitating the administration, finance, human resources, and remote teaching. In this sense, digitalization is a contribution to improvement of teaching, reform of digital teaching, and development of digital teaching quality. Digital transformation plays an important role in the development of digital teaching and learning, reform of teaching quality, improvement of education quality, and betterment of the teaching methods and strategies. Digital teaching transformation contributes to help teachers or educators gain a deeper understanding of digital technology and develop new approaches that are in line with the digital era of the 21st century.

Article-Review History:
Received: 2025-02-27; Revised: 2025-03-19; Accepted: 2025-03-25

About the Author:
Ourn & Than

Journal of Education Innovation & Language Teaching (JEILT)
Peer-Reviewed Journal; Vol. 1, No. 1, pp76-87, 2025
ISSN:3080-4760 (Online); ISSN: 3080-0471 (Print)
DOI: https://doi.org/10.63381/jeilt.v1i1.52
https://jeilt.org
info@jeilt.org

3.3 Challenges Experienced from Digitalization in Qualifying Teaching

Digitalization is a process of transforming the technologies, challenging the digital teaching in 21st century education. Digitalization offers challenges in using the digital technology for digital teaching (MoEYS, 2021). Digitalization gives contributions to the development of distance teaching and e-teaching. Digitalization of education (Hang Chuon, 2021) is important for the use of digital technology and ICT use for advancement of the remote teaching and learning. Teaching digitalization is a vital mission for educational institutions (Dirk et al., 2021) – qualifying the teaching in Cambodian education.

Technological system, including Google Meet, Zoom, Microsoft Team, and beyond, is the digital platform that serves the digital teaching environments. Digitalization of teaching helps teachers develop the methods, strategies, and approaches of digital teaching. Digital teaching is a factor in necessarily developing the curricula at all levels and quality assurance of the digital education in Cambodia, especially the quality of digital teaching. This a mean of digitalizing technologies to process teaching, which is a digital teaching policy – adopting to increase digital teaching knowledge and capabilities, improving the teaching and learning quality, and reforming the approaches of teaching digitation. Digital is a technology that has been transformed for digital education to qualify teacher-training and reform educational quality. Thus, digitalization is very important for transformation of teaching quality, particularly the quality of digital teaching and training.

Digitalization offers teacher challenges experienced from transformation of teaching with digital technology (Paulo, 2020). This means that digitalization challenges the process of assessment and information and/or sharing the information in the teaching and learning environments. Digitalization of the technology create the challenges in processing digital teaching (NV, 2017). Digitalization of teaching is about the transformation of digital technology in qualifying the digital teaching. Digitalization in teaching contributes to the process of digital teaching, as such distance teaching and e-teaching. Thus, the challenges can be experienced from fast digitalization in qualifying the distance teaching or e-teaching.

4. Conclusion

Digitalization was challenged in processing the digital education, as such distance teaching and learning. The challenges can be experienced from fast digitalization in transforming the teaching process. This was a means of challenging the digital capability, literacy, and skills for distance teaching. However, teachers were troubled in digitalizing the teaching. Digital teaching, as such remote teaching and e-teaching, suggested the teachers to have the

Article-Review History:
Received: 2025-02-27; Revised: 2025-03-19; Accepted: 2025-03-25
About the Author:
Ourn & Than

digital competency, skill, and literacy. Digitalization of teaching contributed to quality of digital education. In brief, digitalization in teaching challenges the teachers and learners with distance teaching and learning. In addition, digital teaching, as such distance teaching and e-teaching, factually stated the teacher's challenges with digital knowledge, ability, skill, and literacy in qualifying the digital education.

Reference

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

Al Lily, A. E., Ismail, A. F., Abunasser, F. M., & Alhajhoj Alqahtani, R. H. (2020). *Distance education as a response to pandemics: Coronavirus and Arab culture. Technology in Society, 63*, 101317. https://doi.org/10.1016/j.techsoc.2020.101317

Auh, Y., & Jeung H. (2021). A global inquiry of higher education: Challenges and opportunities in post pandemic. *Journal of Educational Innovation Research, 31*(3), 213-247. http://dx.doi.org/10.21024/pnuedi.31.3.202109.213.

Bae, Y. (2021). LiFE and the lifelong educational transformation of universities. Adult and Continuing Education, 12(2), 63-84. http://dx.doi.org/10.20512/kjace.2021.6.30.63

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/

Choi, S., Seo, Y., Han, H., Park, I., Choi, Y., Lee, D., Chae, S. & Kim, S. (2018). *Analysis and study on demand of adult learners for university lifelong education.* Jincheon: Korea Educational Development Institute

Christensen, R., & Alexander, C. (2020). Preparing K-12 Schools for a pandemic before it occurs. *Journal of Technology and Teacher Education, 28*(2), 261–272.

Di-Pietro, G., Biagi, F., Costa, P., Karpi´nski, Z., & Mazza, J. (2020). *The likely impact of COVID-19 on education: Reflections based on the existing literature and recent international datasets*. Publications Office of the European Union. https://doi.org/10.2760/126686

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

Forrester. (2016) Leading Digital Business Transformation. [Online] Forrester Research, Inc. [20Oct2017] Available: https://www.imd.org/ldbt/digital-business-transformation/

Giannini, S. (2020). *School, health and nutrition: Why covid-19 demands a rethink of education to address gender inequalities*. US Fed News Service, Including US State News.

Global Education Monitoring Report. (2020). *Re-Building resilient education systems: Three lessons on the privatisation of education and one solution emerging from the COVID-19 pandemic*. https://gemreportunesco.wordpress.com/2020/10/02/re-building-resilient-education-systems-two-lessons-on-the-privatisation-of-education-and-one-solution-emerging-from-the-covid-19-pandemic/.

Habibi, F., & Zabardast, M. A. (2020). Digitalization, education and economic growth: A comparative analysis of middle east and OECD countries. *Technology in Society, 63*, Article 101370. https://doi.org/10.1016/j.techsoc.2020.101370

Hang-Chuon, N. (2021). *Digital Transformation in Education.* Ministry of Education, Youth and Sports

Hang-Chuon, N. (2024). Reform of Teacher Education Institutions Towards Vision 20250. (Teachers' Day, 5 October 2024)

IDC. (2015) Digital Transformation (DX): An Opportunity and an Imperative. [Online] IDCResearch. [20Oct2017] Available: https://www.idc.com/prodserv/decisionscapes/RESOURCES/ATTACHMENTS/IDC_254721_ExecBrief_Digital_Transformation.pdf

Kalenzi, C., Back, D., & Yim, M. (2020). *The future of online education: lessons from South Korea.* https://www.weforum.org/agenda/2020/11/lessons-from-south-korea-on-the-future-of-online-education/

Kim, S. (2023). Grade 10 ICT textbook gets makeover with China help. https://www.khmertimeskh.com/501379227/grade-10-ict-textbook-gets-makeover-with-china-help/

Lee, S. (2021). Analysis and overcoming measures of crisis in local universities through social big data analysis. *Comparative Government Review, 25*(2), 215-252. http://dx.doi.org/10.18397/kcgr.2021.25.2.215

Lee, S. (2022). An analysis on crisis of local universities and overcoming measures: Focused on the analysis of convergence education trends

based on social big data. *Korean Comparative Government Review, 26*(3), 49-76. http://dx.doi.org/10.18397/kcgr.2022.26.3.49

Li, C., & Lalani, F. (2020). *The COVID-19 pandemic has changed education forever*. World Economic Forum. This is how https://www.weforum.org/agenda/2020/04/coronavirus-education-global-covid19-online-digital-learning/

Ministry of Education [ME] (2021). University's systematic management and innovation support strategies. https://www.moe.go.kr/boardCnts/viewRenew.do?boardID=294&boardSeq=84467&lev=0&searchType=null&statusY

MoEYS (2019). *Educational Strategy Plan 2019-2023*. Ministry of Education, Youth and Sports

MoEYS (2023). *Educational Strategy Plan 2023-2028*. Ministry of Education, Youth and Sports

MoEYS (2024). *Strategy Plan Reform*. Ministry of Education, Youth and Sports

McCarthy, A. M., Maor, D., McConney, & Cavanaugh, S. C. (2023). Digital transformation in education: Critical components for leaders of system change. *Social Sciences & Humanities Open, 8*, 1-15. https://doi.org/10.1016/j.ssaho.2023.100479

Negreiro, M., & Madiega, T. (2019). European parliamentary research service. EU policies – delivering for citizens. In *Digital transformation*. European Parliament. http://www.europarl.europa.eu/RegData/etudes/BRIE/2019/633171/EPRS_BRI(2019)633171_EN.pdf.

Neri, A. (2019). *We need new tools for the Big Data era*. World Economic Forum.https://www.weforum.org/agenda/2019/01/we-need-new-tools-for-the-big-data-e ra/.

NILE (National Institute for Lifelong Education) (2022a). 2021 pyungsaeng kyoyuk baekseo [White Paper on Lifelong Education]. https://www.nile.or.kr/contents

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 [Organization of Economic Cooperation and Development' (2016). Digital government strategies for transforming public services in the welfare areas. Paris: OECD

OECD. (2017) Key Issues for Digital Transformation in The G20. OECD

OECD. (2019a). *Future of education and skills 2030*. http://www.oecd.org/education/20 30-project/

OECD. (2019b). *Measuring the digital transformation: A roadmap for the future*. Paris: OECD Publishing. https://doi.org/10.1787/9789264311992-en

OECD. (2019c). *OECD initial teacher preparation study. http://www. oecdteacherready.org/key-messages/.*

OECD. (2019d). *Going digital: Shaping policies, improving lives*. Paris: OECD Publishing. https://doi.org/10.1787/9789264312012-en

Park, J. (2006). *Cyber daehakei baljeon bangane gwanhan yeongu* [Strategy for the growth of cyber university]. *Korea Business Education Review, 10*(1), 215-240.

Parlak, B. (2017). Dijital çağda eğitim: Olanaklar ve uygulamalar üzerine bir analiz [Education in Digital Age: An analysis on opportunities and practices]. Süleyman Demirel University, Journal of Faculty of Economics and Administrative Sci*ences, V*ol. 22(15), 1741-1759

Paulo, S. (2020). A System Approach to Digital Education. UNICEF-Timor-Leste, Conference Reimagine Education: ICT & Innovation in Timor-Leste

Paunescu, C., Lepik, K. L., & Spencer, N. (2022). Social Innovation in Higher Education. Springer, Open Access, Open Access: http://creativecommons.org /licenses/ by/4.0/

Pedersen, A. Y., Nørgaard, R. T., & K¨oppe, C. (2018). Patterns of inclusion: Fostering digital citizenship through hybrid education. *Journal of Educational Technology & Society, 21*(1), 225–236.

Pedr´o, F., Subosa, M., Rivas, A., & Valverde, P. (2019). *Artificial intelligence in education: Challenges and opportunities for sustainable development*. United Nations Educational, Scientific and Cultural Organization. UNESCO. https://unesdoc.unesco.org/ark:/48223/pf0000366994?posInSet=11

Perisic, I. (2018). *How artificial intelligence is shaking up the job market*. World Economic Forum. https://www.weforum.org/agenda/2018/09/artificial-intelligence-shaking -up-job-market/.

Ponti, M., B´elanger, S., Grimes, R., Heard, J., Johnson, M., Moreau, E., Norris, M., Shaw, A., Stanwick, R., Van Lankveld, J., Williams, R., & amp; Canadian Paediatric Society, Digital Health Task Force, Ottawa, Ontario. (2017). Screen time and young children: Promoting health and development in a digital world. *Paediatrics and Child Health, 22*(8), 461–468. https://doi.org/10.1093/pch/pxx123

Raab, M., & Griffin-Cryan, B. (2011) Digital Transformation of Supply Chains: Creating Value –When Digital Meets Physical: Capgemini Consulting

Schleicher, A. (2018). *World class: How to Build a 21st-century school system, strong performers and successful reformers in education*. Paris: OECD Publishing. https://doi.org/10.1787/9789264300002-en

Sinclair, A., Brashear, J., & Shacklady, J. (2018). *AI: The momentum mindset. Accenture*. https://www.accenture.com/us-en/insights/strategy/ai-the-momentum-mindset.

Silva, L. (2017). Challenges of Digital Transformation in Higher Education Institutions: A brief discussion. ResearchGate, Conference paper, https://www.researchgate.net/publication/330601808

Sisman, M. (2016). *Eğitim bilimlerine giriş [Introduction to educational sciences]*, Ankara: Pegem Academy Publications.

Supreme National Council [SNC] (2021). *Frameworks of Economic Policy and Digital Society of Cambodia 2021-2035.* Supreme National Economic Council

Taşkıran, A. (2017). Dijital çağda yükseköğretim [Higher education in the digital age] J*ournal of open education practice and research, Vol.* (1), 96-109

Trust, T., Carpenter, J. P., Krutka, D. G., & Kimmons, R. (2020). Remote teaching & #RemoteLearning: Educator tweeting during the COVID-19 pandemic. *Journal of Technology and Teacher Education, 28*(2), 151.

UNESCO. (2020a). #LearningNeverStops: *COVID-19 education response*. https://en.unesco. org/covid19/educationresponse/globalcoalition.

UNESCO. (2020b). *One year into COVID-19 education disruption: Where do we stand?*. https://en.unesco.org/news/one-year-covid-19-education-disruption-where-do-we -stand

van der Vlies, R. (2020). Digital strategies in education across OECD countries: Exploring education policies on digital technologies. In *OECD education working papers*Paris: OECD Publishing. https://doi.org/10.1787/33dd4c26-en. No. 226.

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

JEILT Journal & Publisher
https://jeilt.org/index.php/jeilt
Accelerating Global Knowledge Creation and Sharing