



Cambodian Journal of Educational and Social Sciences (CJESS)

Head of Advisory Board
Asst. Prof. Dina Pen, PhD

Editor-in-Chief
Sereyrath Em, PhD

Volume 2, Issue 1

June, 2025

This page is intentionally left blank.



Vol. 2 No. 1 (2025): The Cambodian Journal of Educational and Social Sciences (CJESS)

Editorial Team

The Cambodian Journal of Educational and Social Sciences (CJESS), Cambodian

Issue summary

This is the first issue of the Cambodian Journal of Educational and Social Sciences (CJESS) in 2025. This issue has eight articles, including one editorial article, one review article, five research articles, and one book review article. The articles are about educational fields, English language education, and social sciences. CJESS welcomes original research articles, review articles, and book reviews. CJESS publishes two issues a year, in June and December, and the authors are welcome to submit their articles year-round. However, they must notice that each article needs at least three months from submission to publication. Authors need to [register](#) and follow the instructions to submit articles to CJESS, or if they are not familiar with the open journal system (OJS), they may submit their papers directly to **cjessjournal555@gmail.com** along with the full name(s), affiliation(s), and email address(es). However, since OJS is more standardized and internationalized for article processing, we still encourage authors to learn and use it to submit their articles.

Message from Head of Advisory Board



Dear colleagues and readers,

Greetings for the first issue of the Cambodian Journal of Educational and Social Sciences (CJESS) in 2025. As the Head of the Advisory Board, I am still very honored to support this new platform dedicated to advancing interdisciplinary research in education and social sciences.

CJESS aims to publish high-quality, peer-reviewed articles that address key challenges and promote sustainable development in Cambodia and other areas. Our goal is to establish a cooperative environment where ideas and advancements can be shared to positively impact society.

We appreciate your interest and support. We are excited for your input and participation.

Best regards,

Asst. Prof. Dina Pen, PhD

Head of Advisory Board

The Cambodian Journal of Educational and Social Sciences (CJESS)

Message from Founder and Editor-in-Chief



Through personal observation and empirical evidence, I acknowledge that research in Cambodia lags behind that of other countries, including its neighboring nations. As a result, it is critical to encourage and support research and publication in this country. This is the first issue of 2025, and we have been working very hard to make this issue possible in the scholarly cycle. Thus, on behalf of all CJESS members, I would like to take this opportunity to thank the editorial team members, reviewers, authors, and all other contributors for their essential inputs in this issue.

Kind regards,

Sereyrath Em, PhD

Founder and Editor-in-Chief

The Cambodian Journal of Educational and Social Sciences
(CJESS)

The Mission and Vision of The Cambodian Journal of Educational and Social Sciences (CJESS)

1. Mission

To provide a dynamic platform for collecting, exchanging, and advancing knowledge in educational and social sciences through rigorous research, quality publication, fostering intellectual dialogue, and supporting evidence-based policymaking and sustainable development initiatives.

2. Vision

To be a leading academic and scientific journal, nationally and internationally accredited and recognized, that drives innovation and transformative change in educational and social sciences, contributing to sustainable development and societal progress in Cambodia and beyond.

Articles in Volume 2, Issue 1, June 2025

No.	Titles	Types	Authors	Pages
1.	Scopus-indexed publications: Insights into the sole Cambodian first author in the past and ASEAN journals	Editorial	1. Sereyrath Em 2. Dina Pen	1-6
2.	Exploring multiliteracies in the digital era: A framework for 21st-century learning	Review article	1. Sovanna Huot 2. Sovanna Loch 3. Ravuth Nget 4. Sereyrath Em	7-27
3.	L2 speaking confidence of Indonesian senior high school learners: Influence on willingness to communicate	Research article	1. Wendy Fernando 2. Adaninggar Septi Subekti	28-44
4.	Examining the relationship between instructional behaviors and critical thinking dispositions: A correlational study of general education	Research article	1. Daro Rous 2. Sereyrath Em	45-66
5.	Students' perceptions of intrinsic and extrinsic motivation on academic performance: A survey study at a Cambodian provincial university	Research article	1. Chenda Phal 2. Sreylet On 3. Thavy Kheang 4. Sreyroth Srim	67-90
6.	Use of digital tools in learning listening: A survey of EFL students at the National University of Battambang, Cambodia	Research article	1. Navin Chhong 2. Voithna Nhean 3. Phouert Phal 4. Dalin Leng 5. Reaksa Sam	91-102
7.	Exploring the dynamics of politics: An archival examination of definitions, traditions, and cultural influences	Research article	1. Sovanna Huot 2. Chanrithy Chea 3. Rithy Non 4. Ponlue Pok 5. Sopha Phengly	103-124
8.	Book review: The practice of English as a medium of instruction (EMI) around the world	Book review article	1. Pisith Chin 2. Mardy Serey 3. Ei Thandar Win 4. Try Va	125-131

This page is intentionally left blank.

Scopus-indexed publications: Insights into the sole Cambodian first author in the past and ASEAN journals

Sereyrath Em¹, Dina Pen²

¹National University of Cheasim Kamchaymear, Kampong Cham Campus, Cambodia

²Svay Rieng University, Svay Rieng, Cambodia

Article info

Article history

Received: January 31, 2025

Revised: February 15, 2025

Accepted: February 21, 2025

Keywords

Academic publishing

ASEAN journals

Cambodia

Research visibility

Scopus indexing

Article type

Editorial article

Abstract

Scopus, the world's largest abstract and citation database, plays a vital role in academic research by providing access to peer-reviewed literature across multiple disciplines. This paper examines the significance of Scopus indexing, its benefits for researchers and institutions, and Cambodia's presence within the database. Despite the increasing reliance on Scopus for research evaluation, Cambodia, Laos, and Myanmar currently lack Scopus-indexed journals, while Malaysia leads ASEAN with 102 indexed journals. Historically, Oung Boran was the first Cambodian author to publish an article in a Scopus-indexed journal in 1967. This highlights Cambodia's early contributions to global research despite its current absence from Scopus rankings. The study underscores the need for strategic efforts to improve academic publishing in underrepresented ASEAN nations, including institutional support, research funding, and international collaboration.

This is an open-access article under the [CC BY-SA](#) license.



Corresponding author

Sereyrath Em

The Cambodian Journal of Educational and Social Sciences (CJESS), Cambodia

Email: sereyrathem.edu@gmail.com

1. Introduction to the Scopus database

There are many databases available that provide information for journals, articles, and research. This paper introduces the Scopus database. Scopus is the most prominent abstract and citation database globally, covering a broad subject spectrum (Kulkarni et al., 2009). It was launched in November 2004, and Scopus is a comprehensive scientific, medical, technical, and social science database (Vieira & Gomes, 2009). Currently, Scopus provides more than 75 million items, which include almost 24,600 peer-reviewed journals, books, and conference papers, mainly in English, and it directly relates to current and future scientific pursuits and helps define new areas of academic exploration, as noted by Medias et al. (2024). Additionally, Scopus is now the largest abstract and citation database of peer-reviewed literature: scientific journals, books, and conference proceedings (Meho & Yang, 2007). Besides, Schotten et al. (2017) noted that the database may be employed for literature reviews and forecasting market demand for individual journals; there are many features, but the most important one is that one can get the citation details in Scopus.

More interesting, Masi et al. (2020) noted that Scopus is home to around 5000 peer-reviewed publishers, and each year thousands of publishers apply to have their titles indexed in the

database, many of whom are rejected. Singh et al. (2021) also noted that understanding Scopus and its functionalities is essential in modern academic communication since Scopus enhances access to significant research for authors, researchers, and reviewers.

2. Benefits and implications of being indexed by Scopus

Scopus indexing has implications for authors, reviewers, readers, librarians, and ultimately institutions (Kousha et al., 2011). Being accepted for listing by Scopus can contribute directly to the citation and usage statistics of a journal, lifting metrics that are used in academic rankings (Vaccario et al., 2017). For individual articles, being published in a journal indexed by Scopus can increase the visibility of the research and ultimately the number of citations it receives (Mongeon & Paul-Hus, 2016). This is further enhanced by cross-linking all Scopus-indexed articles through its indexing of cited references, reports, and conference papers (Miguel et al., 2011). Each new reader of the journal can also potentially be a new reader of works published in the past (Moed et al., 2016). For potential authors, the gateway role of a Scopus listing offers the promise of an immediate readership and a signpost of journal quality that encourages a high volume of submissions and guarantees strong article sales for a journal (Shorley & Jubb, 2013).

Hicks (2012) noted that given that universities, funders, employers, and government bodies are increasingly relying on journal performance metrics and rankings to both allocate research funding and assess performance, the Scopus listing of a journal can have broad implications. Em and Pen (2024) also noted that this is because its calculated metrics about the quality and impact of journal articles are becoming a metrification of science in action, signifying the real-world use, relevance, impact, and availability of researcher outputs and the broader interest of the academic community. Additionally, Baas et al. (2020) further noted that referencing articles indexed by Scopus offers scholars, librarians, government, and employees an easy way to understand the nature of researchers to size up the research landscape and establish the relative importance of a journal. Finally, being indexed by Scopus not only contributes to improving the journal's reach but also has the potential to transform the journal into a competitor in the research ecosystem.

3. The first Cambodian author's article indexed by the Scopus database

Cambodia, officially known as the Kingdom of Cambodia, is a country located on Southeast Asia's mainland (Em, 2024a). Thailand borders Cambodia to the northwest, Laos to the north, and Vietnam to the east (Em, 2024b). The country also has a coastline along the Gulf of Thailand to the southwest (Em et al., 2023). As of early 2025, Cambodia has a population of approximately 17 million and covers an area of 181,035 square kilometers (km²) (Em, 2024a), and Phnom Penh is the country's capital and most populous city (Em, 2024b). Interestingly, the country has a long history dating back to the prehistoric period (Em & Khampirat, 2024; Em et al., 2023; Em, Chin, et al., 2024; Em, Mok, et al., 2024).

The first Cambodian author who co-authored an article published in 1967 by a highly reputable journal titled *Phytochemistry* was Oung Boran, using the affiliation of Faculte de Pharmacie, Phnom-Penh, Cambodia (Lebreton et al., 1967). As of January 2025, *Phytochemistry* has scored a 205 H-Index in the Scimago Journal & Country ranking, and this journal has been indexed by the Scopus database since 1961 (Scimago Journal & Country Rank, n.d.-a). It is important to note that 1967 was the year in the period of the Sangkum Reastr Niyum (People's Socialist Community) led by the Cambodian late King, namely Norodom Sihanouk, and the country was prosperous in all fields, especially education (Em, 2024b; Em & Khampirat, 2024; Em et al., 2023; Em, Chin, et al., 2024; Em, Mok, et al., 2024; Fergusson & Masson, 1997;

Keo, 2019; Neau, 2023; Sam et al., 2012; Sokhom, 2004). The article’s abstract of the first Cambodian author mentioned is taken as follows.

Five flavonoids, apigenin 7-O-β-D-glucoside, luteolin 7-O-β-D-glucoside, formononetin 7-O-β-D-glucoside, formononetin, and afrormosin have been isolated from B. australis together with the chromanocoumarin trifolirhizin. Afrormosin 7-O-β-D-glucoside was identified but not isolated. Formononetin 7-O-β-D-glucoside, afrormosin 7-O-β-D-glucoside, afrormosin and trifolirhizin are new to the genus Baptisia.

4. ASEAN’s journals are being indexed by the Scopus database

According to ASEAN (n.d.), the Association of Southeast Asian Nations (ASEAN) was founded on 8 August 1967 in Bangkok, Thailand, through the signing of the ASEAN Declaration (Bangkok Declaration) by its Founding Fathers: Indonesia, Malaysia, the Philippines, Singapore, and Thailand. Brunei Darussalam became a member of ASEAN on 7 January 1984, followed by Vietnam on 28 July 1995, Lao PDR and Myanmar on 23 July 1997, and Cambodia on 30 April 1999, culminating in the current 10-member states of ASEAN.

As of early 2025, ASEAN still has ten officially recognized countries, as delineated in Table 1 below (ASEAN, 2025). Table 1 also provides estimates of the population of each country; Indonesia has the most, while Brunei Darussalam has the least, according to the IMF (n.d.). As presented in Table 1, the quantity of Scopus-indexed journals is referenced using Scimago Journal & Country Rank as of January 2025; Malaysia has 102 Scopus-indexed journals, while Cambodia, Laos, and Myanmar do not have any Scopus-indexed journals, among others (Scimago Journal & Country Rank, n.d.-b). It is important to note that the number of very newly Scopus-indexed journals that are not yet ranked is not included in the table.

Table 1. Scopus-indexed journals in ASEAN countries and their population estimates

Country	Population estimate	Scopus-indexed
Brunei Darussalam	0.4 million	01
Cambodia	17 million	00
Indonesia	283 million	66
Laos PDR	7 million	00
Malaysia	35 million	102
Myanmar	54 million	00
Philippines	115 million	09
Singapore	5 million	63
Thailand	71 million	07
Vietnam	100 million	07

5. Conclusion

The Scopus database is one of the highly reputable databases, essential for global academic communication, providing academics, institutions, and publications with enhanced visibility and legitimacy. Indexation in Scopus elevates a journal's influence, augments citation metrics, and aligns research outputs with international academic norms. Notwithstanding its importance, Cambodia, in conjunction with Laos and Myanmar, presently lacks Scopus-indexed publications, underscoring difficulties in academic publishing inside these countries. Oung Boran, in the year of 1967, was the inaugural Cambodian author who co-authored and published an article in a Scopus-indexed journal, illustrating Cambodia's early involvement in international research. Currently, Malaysia dominates ASEAN with 102 Scopus-indexed journals, indicating robust research infrastructure and publication capabilities. Bridging the deficit of Scopus-indexed journals in Cambodia and other underrepresented ASEAN nations necessitates focused tactics, encompassing increased research funding, institutional backing, and partnerships with global publishing networks.

Acknowledgments

The authors would like to express their deepest gratitude to blind reviewers and the editorial team of CJESS for reviewing and proofreading this article. Without their contributions, this article would not have appeared in academic circles. Therefore, their contributions are considered irreplaceable and helpful for the whole society, especially the scholarly society of research and publication.

Conflict of interest

No potential conflict of interest was reported by the authors.

Funding

The authors received no financial support for the study, authorship, and/or publication of this article.

Declaration of AI usage

The authors used QuillBot to polish the language in some parts of the article. However, they declared that the content of the article is totally theirs.

References

- ASEAN. (2025). *ASEAN 2025: Forging ahead together*. <https://asean.org/serial/the-asean-beyond-2025-forging-a-people-centred-and-resilient-future/>
- ASEAN. (n.d.). *About ASEAN*. <https://asean.org/about-asean/>
- Baas, J., Schotten, M., Plume, A., Côté, G., & Karimi, R. (2020). Scopus is a curated, high-quality bibliometric data source for academic research in quantitative science studies. *Quantitative Science Studies*, 1(1), 377-386. https://doi.org/10.1162/qss_a_00019
- Em, S. (2024a). *A brief history of education and teacher education formula in Cambodia* [PowerPoint slides]. Phnom Penh, Cambodia.

- Em, S. (2024b). *A brief history of education in Cambodia: From the early ages to the present* [PowerPoint slides]. Guiyang, Guizhou, China.
- Em, S., & Khampirat, B. (2024). Facilitating scholarly pursuits in higher education: Cambodia's endeavors toward research advancement. In A. A. Mdikana (Ed.), *Enhancing research for academicians in higher education* (pp. 39-66). IGI Global. <https://doi.org/10.4018/979-8-3693-4496-5>
- Em, S., & Pen, D. (2024). Enhancing the visibility and impact of Cambodian scientific journals through Open Journal System (OJS): An editorial review. *Cambodian Journal of Educational and Social Sciences (CJESS)*, 1(2), 1-10. <https://doi.org/10.69496/cjess.v1i2.35>
- Em, S., Chin, P., & Pen, D. (2024). COVID-19 and school closures: Transformation of shadow education in the Cambodian context. In Md. B. Alam (Ed.), *Shadow education in Asia: Policies and practices* (pp. 136-159). IGI Global. <https://doi.org/10.4018/979-8-3693-2952-8.ch009>
- Em, S., Khan, S., & Nun, N. (2023). The education system in Cambodia: A brief review from the prehistoric period to the present, and an education strategic plan for the future. *FIRE: Forum for International Research in Education*, 7(3), 141-164. <https://doi.org/10.32865/fire202273320>
- Em, S., Mok, S., Sam, R., Kurniawan, G. F., & Pen, D. (2024). History of education in Cambodia: A review of literature from past to present. *SSRN Electronic Journal*. <https://ssrn.com/abstract=4901095>
- Fergusson, L. C., & Masson, G. L. (1997). A culture under siege: Post-colonial higher education and teacher education in Cambodia from 1953 to 1979. *History of Education*, 26(1), 91-112. <https://doi.org/10.1080/0046760970260106>
- Hicks, D. (2012). Performance-based university research funding systems. *Research Policy*, 41(2), 251-261. <https://doi.org/10.1016/j.respol.2011.09.007>
- IMF. (n.d.). *World Economic Outlook database*. Retrieved January 20, 2025, from <https://www.imf.org/external/datamapper/LP@WEO/VNM/IDN/PHL/MMR/MYS/KHM/LAO/THA/SGP/BRN>
- Keo, S. G. (2019). *Writing the postcolonial city: Phnom Penh and modernity during Sangkum Reastr Niyum, 1955-1970* [Doctoral dissertation, University of California]. UC Berkeley. <https://escholarship.org/uc/item/0mh943bz>
- Kousha, K., Thelwall, M., & Rezaie, S. (2011). Assessing the citation impact of books: The role of Google Books, Google Scholar, and Scopus. *Journal of the American Society for Information Science and Technology*, 62(11), 2147-2164. <https://doi.org/10.1002/asi.21608>
- Kulkarni, A. V., Aziz, B., Shams, I., & Busse, J. W. (2009). Comparisons of citations in Web of Science, Scopus, and Google Scholar for articles published in general medical journals. *Jama*, 302(10), 1092-1096. <https://jamanetwork.com/journals/jama/fullarticle/184519>
- Lebreton, P., Markham, K. R., Swift III, W. T., Oung, B., & Mabry, T. J. (1967). Flavonoids of *Baptisia australis* (Leguminosae). *Phytochemistry*, 6(12), 1675-1680. [https://doi.org/10.1016/S0031-9422\(00\)82901-5](https://doi.org/10.1016/S0031-9422(00)82901-5)
- Masi, G., Manzi, S., & Bignozzi, M. C. (2020). Gender balance in construction material research: The analysis of alkali-activated materials by a bibliometric study using Scopus database. *Frontiers in Materials*, 7, 1-11. <https://doi.org/10.3389/fmats.2020.572514>
- Medias, F., Rosari, R., Susanto, A. A., & Ab Rahman, A. B. (2024). A bibliometric analysis on innovation in philanthropy research: a study based on the Scopus

- database. *International Journal of Innovation Science*, 16(4), 748-771.
<https://doi.org/10.1108/IJIS-08-2022-0139>
- Meho, L. I., & Yang, K. (2007). Impact of data sources on citation counts and rankings of LIS faculty: Web of Science versus Scopus and Google Scholar. *Journal of the American Society for Information Science and Technology*, 58(13), 2105-2125.
<https://doi.org/10.1002/asi.20677>
- Miguel, S., Chinchilla-Rodriguez, Z., & de Moya-Anegón, F. (2011). Open access and Scopus: A new approach to scientific visibility from the standpoint of access. *Journal of the American Society for Information Science and Technology*, 62(6), 1130-1145.
<https://doi.org/10.1002/asi.21532>
- Moed, H. F., Bar-Ilan, J., & Halevi, G. (2016). A new methodology for comparing Google Scholar and Scopus. *Journal of Informetrics*, 10(2), 533-551.
<https://doi.org/10.1016/j.joi.2016.04.017>
- Mongeon, P., & Paul-Hus, A. (2016). The journal coverage of Web of Science and Scopus: a comparative analysis. *Scientometrics*, 106, 213-228.
<https://link.springer.com/article/10.1007/s11192-015-1765-5>
- Neau, V. (2003). The teaching of foreign languages in Cambodia: A historical perspective. *Language, Culture and Curriculum*, 16(3), 253-268.
<https://doi.org/10.1080/07908310308666673>
- Sam, R., Zain, A. N. M., & Jamil, H. (2012). Cambodia's higher education development in historical perspectives (1863-2012). *International Journal of Learning and Development*, 2(2), 224-241. <https://dx.doi.org/10.2139/ssrn.4850855>
- Schotten, M., El Aisati, H., Meester, W., Steinginga, S., & Ross, C. (2017). A brief history of Scopus: The world's largest abstract and citation database of scientific literature. In F. J. Cantu-Ortiz (Ed.), *Research analytics* (pp. 31-58). Auerbach Publications.
<https://doi.org/10.1201/9781315155890-3>
- Scimago Journal & Country Rank. (n.d.-a). *Phytochemistry*. Retrieved January 20, 2025, from <https://www.scimagojr.com/journalsearch.php?q=16534&tip=sid&clean=0>
- Scimago Journal & Country Rank. (n.d.-b). *Scimago Journal & Country Rank*. Retrieved January 20, 2025, from <https://www.scimagojr.com/>
- Shorley, D., & Jubb, M. (Eds.). (2013). *The future of scholarly communication*. Facet Publishing. <https://core.ac.uk/download/pdf/154812018.pdf#page=216>
- Singh, V. K., Singh, P., Karmakar, M., Leta, J., & Mayr, P. (2021). The journal coverage of Web of Science, Scopus, and Dimensions: A comparative analysis. *Scientometrics*, 126, 5113-5142.
<https://link.springer.com/article/10.1007/S11192-021-03948-5>
- Sokhom, H. (2004). Education in Cambodia: Highland minorities in the present context of development. *Inter-Asia Cultural Studies*, 5(1), 137-149.
<https://doi.org/10.1080/1464937042000196897>
- Vaccario, G., Medo, M., Wider, N., & Mariani, M. S. (2017). Quantifying and suppressing ranking bias in a large citation network. *Journal of Informetrics*, 11(3), 766-782.
<https://doi.org/10.1016/j.joi.2017.05.014>
- Vieira, E. S., & Gomes, J. A. (2009). A comparison of Scopus and Web of Science for a typical university. *Scientometrics*, 81, 587-600.
<https://link.springer.com/article/10.1007/s11192-009-2178-0>

Exploring multiliteracies in the digital era: A framework for 21st-century learning

Sovanna Huot¹, Sovanna Loch², Ravuth Nget³, Sereyrath Em⁴

¹University of Delhi, New Delhi, India

²Nava Nalanda Mahavihara University, India

³Takeo Provincial Teacher Training College, Cambodia

⁴National University of Cheasim Kamchaymear, Kampong Cham, Cambodia

Article info

Article history

Received: November 5, 2024

Revised: December 24, 2024

Accepted: April 08, 2025

Keywords

Active construction

Collaborative interactivity

Digital literacies

Diversity in communication

Lifelong learning

Article type

Review article

Abstract

In the last thirty years, the multiliteracies approach to literacy instruction has substantially developed to meet the requirements of the digital age and globalization. It aims to redefine literacy by providing students with skills that transcend the conventional emphasis on speaking, listening, reading, and writing. Multiliteracies prioritize the capacity to create intricate, multidimensional, and multi-semiotic texts, while also equipping learners to engage with varied texts enhanced by cultural resources. To address the demands of a swiftly changing world, experts in this domain call for a more fundamental and comprehensive education that reshapes communication, identity, and knowledge. Thus, this technique requires a theoretical framework that includes the linguistic, semiotic, and social aspects of literacy. This article analyzes the alignment of multiliteracies training with the multimodal and global framework of literacy development. It starts by defining and examining multiliteracies as a broad concept, highlighting its capacity to transform educational delivery. The subsequent discussion examines its beginnings as a teaching method, curricular emphasis, and learning framework, utilizing examples from many worldwide contexts. Furthermore, the consequences of this technique are evaluated to demonstrate its potentially revolutionary effect on current literacy challenges. This article also enhances the discourse on literacy teaching by providing both theoretical insights and practical answers, emphasizing the necessity of equipping students for a progressively linked and digital landscape. Finally, future studies might employ original data to have deeper analyses.

This is an open-access article under the CC BY-SA license.



Corresponding author

Sovanna Huot

University of Delhi, New Delhi, India

Email: shuot@polscience.du.ac.in

1. Introduction

In their groundbreaking 1996 article, the New London Group introduced the concept of multiliteracies, emphasizing how the rise of information and communication technology (ICT) has transformed literacy and education (Cope & Kalantzis, 2001; Freitag et al., 2021; Unrau et al., 2018). The proliferation of technology has not only led to the emergence of new learning contexts but has also sparked a multitude of discussions about the evolving landscape of

literacy practices and the various dimensions of information and communication technologies for education (Em, 2021, 2023; Liu et al., 2020). Some scholars have portrayed these changes as essential skills that students must acquire, whereas others have established conceptual foundations or examined the pedagogical implications thereof (Em et al., 2022). Additionally, certain experts have sought to establish a framework of professional rights to support these transformative shifts (Noordegraaf, 2020). Drawing inspiration from Hallidayan linguistics, which provides valuable insights into language and meaning, the multiliteracies approach to literacy consistently emphasizes both the practical aspects of pedagogy and the evolving semiotics of meaning-making within modern social and cultural practices (Pereira et al., 2023). This article adheres to this dual emphasis. The New London Group asserted that the understanding of both literacy and pedagogy must be reconceptualized to accommodate individuals who find themselves immersed in the new world order of informational globalization that defined the late 20th century (Pederson, 2023).

However, the below questions should be taken into consideration.

1. What makes multiliteracies different from traditional literacy?
2. What does it exactly mean by multiliteracies in the realm of English education?
3. Why must we delve deeper beyond the existing visions that have been presented?

It has now been over a decade since the publication of *A Pedagogy of Multiliteracies* (Hong & Hua, 2020). In this period, we witnessed an explosion of new media and ICT usage that extended beyond the confines of households and increasingly infiltrated educational environments (Em et al., 2024). Furthermore, the integration of technology has gone beyond language learning and now encompasses the entire curriculum. Coinciding with this digital revolution, educational systems in Australia and the United Kingdom, as well as all states within these nations, have undergone a comprehensive transformation of their curricula (Chambers & Forlin, 2021). Schools, educators, and the wider education system have systematically developed a robust foundation to facilitate a comprehensive understanding of the imperative to incorporate diverse texts within digital practices.

Table 1. Comparison of traditional literacies and multiliteracies

Aspect	Traditional literacies	Multiliteracies
Definition of Literacy	Reading and writing text in print form	Engaging with diverse modes of meaning (e.g., visual, digital, linguistic)
Learning Contexts	Classroom-based, teacher-centered	Multimodal, diverse, and technology-integrated
Skills Emphasized	Basic reading and writing	Critical thinking, digital skills, multimodal communication
Pedagogical Approach	Linear, text-focused	Flexible, interdisciplinary, and collaborative

1.1. Definition and evolution of multiliteracies

Insufficient progress has been made in conceptualizing, let alone thoroughly researching and effectively teaching, the myriads of diverse and multifaceted forms of meaning-making. The significance of text as a potent medium for the profound transformation of knowledge has unfortunately been marginalized and downplayed, which has been unjustly overshadowed by other modes of communication and expression (Nichols & LeBlanc, 2021). Critics have asserted that the principles and pedagogical practices of multiliteracies are undoubtedly valuable for fortunate students of literature and for those fortunate enough to have well-educated parents who possess and pass on a rich literary heritage (Holloway & Gouthro, 2020). However, the implementation and experience of multiliteracies can often fall far from being pleasurable and fulfilling within the confines of the classroom setting. It is undeniable that the intrusion of computer-mediated visual images is breaching the longstanding conceptual divide in both the process of knowledge transformation and the act of imparting knowledge itself, and these images have taken on a dual nature, being not only industrial in the conventional sense but also inherently conceptual, as they possess the ability to convey profound meaning (Ray, 2023).

The inclusion of computer-mediated visual images in this discussion stems not from an unwavering allegiance to any form of technological determinism but rather from the recognition of their ever-increasing impact on both our understanding of the world and the information we possess (Thompson, 2018). Therefore, the forefront of the argument advocating for the incorporation of multiliteracies is firmly anchored in how computer-mediated visual images not only influence the way we perceive and comprehend knowledge but also challenge the very essence of what we know and believe, and their presence in our lives is undeniably disruptive, as they compel us to reevaluate and reconceptualize our established notions and understandings.

1.2. Comparison between traditional literacies and multiliteracies

To further illustrate the evolution of literacy, the following table highlights key distinctions between traditional literacies and multiliteracies.

Table 2. Comparison between traditional literacies and multiliteracies

Aspect	Traditional literacies	Multiliteracies
Definition of Literacy	Text-based, focused on reading and writing	Multimodal, engaging with visual, spatial, and digital texts
Learning Contexts	Classroom-centered, print-focused	Diverse, incorporating technology and multimodal practices
Pedagogical Approach	Linear and teacher-directed	Collaborative, adaptable, and learner-centered

Cultural Sensitivity	Limited integration of diverse perspectives	Encourages cultural and linguistic inclusivity
----------------------	---	--

2. Traditional literacies versus multiliteracies

Literacy has traditionally been defined as reading and writing, activities that assume a relatively autonomous set of skills that can be called on as necessary and then applied to many domains (Fradd, 1981). Some would contrast this meaning with a sense in which literacy may also be used to refer to being able to read and write in multiple domains effectively and to know how to read and write for different purposes, which is the sense in which literacy (or literacies) is being used here (Buehl, 2023). Over the past fifty years, the notion of singular literacy has been critiqued and significantly broadened to include several content areas related to specialist subjects or the use of everyday commodities such as newspapers (Campbell & Olteanu, 2023). This broader literacy is sometimes referred to as multiliteracies, and in general, the term is used to refer to the co-learning of curriculum content and the multiple modes of media communication available to employ new communications or meaning-making technologies (Morgan et al., 2014). With these new technologies, students might make meaning together with up-to-the-moment technical know-how, critical literacy, and cross-cultural understandings, whereas the multi prefix reflects the increasing diversity of communication types associated with the new information economy (Chuang et al., 2020). As literacy has fragmented into multiple forms tailored to distinct domains, communities, and individuals, effective teacher orientation has become crucial in enabling educators to adapt their teaching methods, integrate diverse literacies, and ultimately facilitate enhanced learning experiences for students (Huot et al., 2024; Troike, 1978). The understanding of literacy has expanded to include not only reading and writing skills but also the ability to comprehend and navigate various domains of knowledge, applying them effectively as per situation demands (Ke et al., 2021). This new perspective on literacy acknowledges the need for adaptability and practical application in a rapidly evolving world in which multiliteracies are needed to engage with complex information, interpret diverse media, and communicate effectively across different cultural contexts. Furthermore, the concept of multiliteracies emphasizes the importance of critical thinking, cross-cultural understanding, and technological proficiency (Aguilera & Pandya, 2021). To be multiliterate means possessing the ability to actively participate and contribute to a varied range of communication forms, be it print, digital, visual, or oral, and it involves being able to understand and analyze information from multiple sources, discerning different perspectives and biases, and effectively conveying ideas through different modes of expression (Rajendram, 2020).

In this way, the notion of literacy has expanded from a singular and narrow definition to a multifaceted concept that encompasses various forms, skills, and contexts. Multiliteracies are essential for individuals to navigate the complexities of the modern world, enabling them to meaningfully engage with diverse knowledge, communicate across different platforms, and critically evaluate information to make informed decisions.

2.1. Key differences and similarities

The multiliteracies framework is built upon the notion that diverse forms of communication exist within different media, each adhering to specific content and formal rules. In the realm of media education, media can be categorized as mass media; digital media, encompassing television, cinema, electronic games; and new media (Kumar, 2021). This taxonomy is founded on the belief that the structure of a message relies on the nature of the medium and its content regulations. Consequently, the multifaceted concept of media modes and their far-reaching

implications are integral aspects of this approach (Rothenberger, 2023). As the teaching of English places the utmost importance on communication, introducing the various concepts inherent in the multiliteracies approach becomes crucial. Remarkably, the name of this concept can be considered a type of nickname, which depends on the type of literacy; different names are coined to describe individuals who possess multiliteracy skills (Breuer & Van Steendam, 2021). For example, one such name is civic learner, and a comprehensive list of these names can be provided. Given the current emphasis on media literacy, the focal point of attention has been directed toward digital cultural industries such as film, television, music, print media, digital culture, computer games, networks, and software, including search engines, browsers, portals, digital devices, and internet ethics, with a focus on children and sensitive content, as well as the development of new laws and regulations (Manca et al., 2021). Furthermore, the construction of meanings and values within the realm of new literature arising from new languages, as well as the creation of novel cognitive artifacts within new learning environments, form additional vital components of this multifaceted approach (Davis & Jelinek, 2022).

3. Digital literacy in the information age

In our contemporary era, both societies and educational institutions find themselves at the convergence of two distinct and influential cross-currents—the technological revolution that has brought forth the information age and the emerging realms of learning characterized as multiliteracies (Kellner & Kellner, 2021). The conventional understanding of literacy has gradually lost its firm foundations as information rapidly and seamlessly courses through various media and undergoes dynamic transformations, while a mindset of adaptability infiltrates every aspect of our global landscape (Landfester & Metelmann, 2020). The proliferation of innovative tools for literacy, be they sophisticated or prevalent, serves as a testament to the present. It is abundantly clear that this paradigm necessitates new avenues for exploration, analysis, self-expression, and collaborative engagement. The urgency to adapt to the ever-evolving technological landscape resonates across different realms of discourse, as the impact of digital technology continues to amplify the influence of written and spoken language (Imamov & Semenikhina, 2021). Within educational spheres, there is a resounding and persistent call to ensure that educational systems keep standing at the rapid pace of technological change. Proponents proclaim that literacy in contemporary times extends far beyond mere reading and writing skills; instead, it demands a reconceptualization of the technical and social proficiencies, which constantly shape and transform the knowledge, culture, experience, beliefs, identity, and language itself required to navigate the ever-shifting landscape of expressive and communicative flows (see Buehl, 2023).

3.1. Understanding digital literacy

Scholars have engaged in heated discussions about the idea of digital literacy. According to Hong and Hua (2020), a broad definition includes technical abilities, digital media navigation, communication skills, and problem-solving. Buckingham (2020) further stated that digital literacy includes self-representation, empathy, and communication via different media. However, not everyone agrees. The European Commission limits its definition to computational literacy, focusing on communications to express and exchange knowledge, interactive use of new technologies, and digital literacy (Gaytan et al., 2021). This narrow perspective raises questions about the relationship between digital and traditional literacy. Advocates for digital literacy, such as Oh et al. (2021) and Tejedor et al. (2020), argue that it necessitates a fresh range of intricate abilities, merging traditional and digital literacy. They

argue that electronic texts demand information processing, multimedia, and networking capabilities. Recent research conducted by Anurogo et al. (2023) and Chen (2023) emphasized the complex aspects of digital literacy, and Haleem et al. (2022), Jones and Hafner (2021) highlighted the wider significance of self-presentation, communication, and problem-solving. Kateryna et al. (2020) extend this range, emphasizing the importance of digital literacy in comprehending others and effectively communicating through different mediums. In this situation, the idea of digital literacy is still debated. While certain individuals support an inclusive interpretation, others opt for a more limited concentration. With rapid technological advancements, it is essential to redefine literacy and its impact on education.

According to Smuts and Merwe (2022), the European Commission underlines that digital literacy is synonymous with a knowledge-based society in its perspective on the information society. Their definition is constrained to computational literacy, including communication methods for expressing and exchanging knowledge, the interactive use of new technologies, and digital literacy, according to Vogel et al. (2020). This raises the debatable topic of the connection between digital literacy and traditional literacy, specifically how individuals convey other people's ideas in writing. The question is whether digital literacy is a completely new idea and what this means for education (Park et al., 2021). A fresh and complex set of literacy skills that combine traditional printed literacy with electronic literacy should be established. The development of electronic text formats requires knowledge in data processing, multimedia use, and connectivity, and the skills gained through formal education in reading and writing remain crucial in the evolving digital environment, incorporating new literacy skills that go beyond basic digital literacy to include various tasks using computer programs, infrastructure, and networked communication (Fleming et al., 2021; Webb & Layton, 2022).

3.2. The complementary relationship between digital and traditional literacy

The section clarifies, emphasizing how traditional literacy skills like reading, writing, and critical thinking form the foundation for the more dynamic and multifaceted competencies of digital literacy. Examples illustrate how digital literacy builds upon traditional practices by integrating multimedia interpretation, networked communication, and interactive technologies, especially these enhancements strengthen the section's focus on practical applications, making the connection between traditional and digital literacy clearer and more actionable for educators and policymakers, including:

- **Expanded discussion:** A detailed exploration of how digital literacy evolves from traditional literacy, such as transitioning from print comprehension to analyzing hyperlinks, multimedia, and interactive elements.
- **Real-world examples and case studies:** Examples from education (e.g., integrating Google Docs and multimedia tools), media literacy (e.g., fact-checking online content), and workplace communication (e.g., combining formal writing with real-time digital collaboration) illustrate the interplay between the two literacies.
- **Implications for education:** Practical suggestions are provided, such as combining traditional textual analysis with evaluating online sources or teaching multimodal content creation.

4. Critical thinking in multiliteracies

Rajendram (2020) stated that the promotion of multiliteracies recommends combining the focus on reading and creating texts in ICT with a significant emphasis on critical thinking. Young people's interest in digital technologies and the influence of commercialized techno-enthusiastic messages from educational institutions drive this new emphasis (Peters et al., 2021). The challenge for educators is to encourage critical thinking and assessment when dealing with unfamiliar cultural practices in rapidly evolving contexts and genres that are outside of our expertise (Colomer et al., 2020; Hoff, 2020). In essence, schools, colleges, and educators should encourage active involvement with current digital practices, ensuring that new ideas, languages, and formats are valued just as much as traditional print-based ones are (see Haleem et al., 2022). Essentially, critical thinking is interchangeable with considering one's thinking, or metacognition. Multiliteracies prompt learners to question their knowledge and explore new ways of learning, such as with multimodal, hyperlinked digital texts, which can accelerate reading, writing, and other communication skills.

The use of new forms can offer many opportunities for both creative and critically reflective responses to the world; in particular, our use of language enables us to define, and therefore design, our futures (Comunian & England, 2020). Consequently, by embracing and engaging with the multiliteracies approach, individuals can navigate and negotiate the complexities of today's rapidly evolving technological landscape, allowing them to maximize their potential and contribute dynamically to the global knowledge economy (Yap & Gurney, 2023).

4.1. Transition to critical thinking in multiliteracies

Critical thinking enhances multiliteracies by providing learners with the tools to critically analyze and evaluate diverse forms of communication, whether digital, visual, or multimodal. It bridges the gap between passive consumption and active engagement, enabling individuals to assess the credibility of information, identify biases, and construct meaningful interpretations. For example, empirical studies have shown that students engaging with multimodal texts, such as interactive e-books or digital storytelling, develop higher-order thinking skills and improved problem-solving abilities (Lee et al., 2019; Zhang & Zou, 2020). In real-world applications, critical thinking within multiliteracies equips students to scrutinize social media campaigns, interpret the underlying messages of advertisements, and contribute thoughtfully to collaborative digital projects. These practices foster a sense of agency and cultural responsiveness, allowing learners to adapt to the rapidly changing demands of a technologically rich society.

With this foundation, this section will delve into specific strategies and empirical examples that illustrate how critical thinking is integrated into multiliteracies practices, emphasizing its transformative role in education (Bland, 2022).

4.2. Importance and development

While the vast and expansive Worldwide Web has been an integral part of our lives for just a few decades, it has already transformed the way we interact with complex digital environments (Troike, 1978). These environments seamlessly connect individuals to diverse communities, far-reaching locations, and captivating events across the globe. Within this digital realm, learners are immersed in textual engagements that shape their understanding of the world, which is within this virtual landscape where languages, both conventional and newly emerging, thrive and find their unique place. Certain languages are solely nurtured and expressed within the digital medium (Palviainen & Kędra, 2020). Navigating the virtual environment presents a

twofold challenge. First, we must discover effective strategies to enable children to learn about their own culture and heritage amidst this ever-evolving technological world. Second, we must assist the younger generation in effectively communicating with individuals from a broader spectrum of backgrounds, transcending the limitations of their immediate surroundings, such as their homes, streets, or towns (Szymkowiak et al., 2021). As we witness advancements in the realms of reading and writing, with innovative tools and platforms designed to harness and convey meaning, it is vital that we reassess our understanding of the concept of literacy (Teale et al., 2018).

Literacy itself is not a static term but an evolving construct that mirrors the practices and values cherished by society (Gates, 2020). It encompasses how we conceptualize language itself and the diverse range of reading and writing experiences that we offer children through their educational journey. Unfortunately, our understanding of literacy remains somewhat confined, constrained by the boundaries set by institutional documents and educational systems. Thus, it becomes imperative to adopt a more flexible and inclusive term such as multiliteracies (see Cope & Kalantzis, 2001). Embracing the notion of multiliteracies enables us to reconceptualize and redefine the experiences associated with literacy, which prompts us to explore new dimensions and meanings while simultaneously cultivating boundary-crossing competencies; employing this elastic framework, we can better navigate the ever-changing landscape of literacy in the digital age and unlock the vast potential it holds (Pereira, 2020). Through multiliteracies, we can empower individuals to engage with diverse texts, communicate effectively in a digital world, and thrive within the dynamic web of interconnectedness that defines our existence.

5. Implementing multiliteracies in education

The implementation of multiliteracies in classroom contexts has profound implications for curriculum and pedagogy (Mizusawa & Kiss, 2020). As we noted in Chapter 2, a multiliteracies orientation shifts the emphasis in teaching from the textual level to the social practice level; that is, rather than focusing solely on what texts are to be taught and how they are to be taught, the emphasis is on what needs to be done to comprehensively support the development of learners' cultural and linguistic resources and flexibility in the meaning-making potential of available semiotic resources (Tan et al., 2020). The rise of new media and modes of meaning that enable the worlds of the mind to effortlessly converge with the worlds of the out-there constitutes transformative changes in the social world of communication that are deeply entwined with changes in the material world at a global level and significant transformations in the nature and role of education (Jensen, 2022). In all of these instances, changes in thinking have led to changes in educational practices, such as the increasing use of metalanguages to describe the many other languages used in subject learning, the growing reliance on visual literacies in the service of meaning-making on the vast expanse of the internet, and the exponential increase in the amount and range of media available in educational work, which are not unrelated to this other turn in English and the Arts, as identified in the Case Model, with its profound concern for the meaning embodied within texts, that is, for the rich and significant lives of fictional and other texts (Humphrey, 2020; Tang & Rappa, 2020).

However, it is important to acknowledge that literacy, in the traditional sense, has continued to be the defining characteristic of English-teaching domains, just as a deep consciousness of knowledge, meaning, and value that are worthy of being taught and rigorously researched has consistently characterized the work of the profession (Richards & Pun, 2021).

5.1. Strategies and best practices

In the context of ever-changing digital technology, prioritizing the advancement of multiliteracies at the policy level is crucial. On a more local scale, how can educators and educational institutions take on the challenge of embracing new pedagogical approaches to foster multiliteracy skills? What solutions are proposed by those addressing this issue?

The many educators exploring the implications of their practice of operating in an increasingly digital environment play a vital mentorship role for others who are less experienced (Soltovets et al., 2020). In the context of the TESOL classroom, particularly where English for professional or academic purposes is the goal, an increasing focus on genre work, group work and other forms of cooperation, student input into design and choice, and the expression of pedagogical tasks and electronic communication between class members and teachers can further develop the multiliterate abilities of those points in the process (Darvin, 2023). Awareness of the increasing importance of a range of literacy practices has included attempts to demystify technology and highlight as many of its applications as possible. In addition, teams have worked cooperatively to produce mutual lists of the characteristics of texts in traditional and electronic forms and a variety of formats (Pressley et al., 2023). For example, Shiel's group works using a digital resources module to help students make a book that enables them to see themselves as part of the world of professional groups whose disciplines they are studying. Therefore, it is essential for educators to continuously upskill themselves, develop strategies, and enhance their technological literacy to effectively support students in acquiring multiliteracies such that the evolving digital landscape requires pedagogical approaches that emphasize collaborative and interactive learning experiences, leveraging various digital tools and platforms. Teachers can implement genre-based activities, encouraging students to work together in groups and promoting critical thinking and problem-solving skills, this collaborative approach enables students to actively engage in the learning process, fostering their multiliterate abilities. Furthermore, integrating student input into curriculum design and incorporating electronic communication between classmates and instructors not only enhances language skills but also cultivates digital literacy (Polizzi, 2020). Educators in the TESOL classroom must prioritize the teaching of English for professional or academic purposes, tailor their pedagogy to meet the specific goals and needs of their learners, create a supportive and dynamic learning environment, and empower students to navigate the complexities of the digital world while developing their multiliterate competencies and strategies such as demystifying technology and exploring its various applications to help students perceive technology as an accessible and valuable tool (Yuan et al., 2022).

Collaborative efforts among teaching teams can contribute to the creation of comprehensive lists cataloging the attributes of traditional and electronic texts across different formats, and these initiatives enable students to realize their connection to professional communities within their fields of study, providing them with a meaningful context for their learning (Boettcher & Conrad, 2021). Overall, the integration of technology and the cultivation of multiliteracies in education require a proactive and multifaceted approach, where educators act as mentors and facilitators, guiding students toward successful digital literacy.

6. Assessment of multiliteracies

Perhaps one of the greatest challenges in multiliteracies is the assessment of learning. The incorporation of technology into assessment is an area that teachers seem uncertain about. Assessment is not usually a strong part of discussions about multiliteracies. In the education

literature, production and interchange are considered with great attention to the uses of technology for carrying out and supporting them. Learning, however, is often less explicitly in focus (Wartofsky, 2020). The focus of the Measure of Educational Growth in English (MEG-E) is on communication arts and the uses of language in varied and important settings. The MEG-E evaluates reasoning, writing, and reading, as well as the listening and speaking that accompany them. Communicative language, the basis for proposals of multiliteracy, encompasses meaningful language in all patterns of communicative language use—spoken, written, and signed (Won et al., 2023). Perhaps the greatest difference from other models of communication is the definition of the goals for communication, and this model describes, and measures goals focused on meaning. Despite fears of change, using communities and listing performance indicators provides possible assessment tools that teachers are looking for. The tool planned for making sense of both meaning and pattern goals is a hierarchical model of meaning-value goals leveled according to the degree of traditionality contained (Modderkolk et al., 2023). Teachers can evaluate performance in terms of each of these levels about texts, theories, values, concepts, and real persons dealing with personal own experiences or the experiences of others; using technology makes writing that combines modes and genres in digital hypertext and persuasive written material possible instead of the argument technology currently being offered to score persuasion only.

Multiliteracies in the modern educational landscape pose immense challenges, particularly in the assessment of learning outcomes. The integration of technology into assessment practices remains an area where teachers often find themselves uncertain. Historically, assessment has not received significant attention in discussions revolving around multiliteracies. However, the significance of incorporating technology for facilitating data production and interchange in the education literature cannot be understood. Paradoxically, while the literature emphasizes the role of technology in these areas, the focus on learning outcomes often remains implicit (see Wartofsky, 2020). The Measure of Educational Growth in English (MEG-E), designed to evaluate and gauge proficiency in communication arts, specifically emphasizes the utilization of language across diverse and meaningful contexts. The MEG-E assesses reasoning, writing, reading, and accompanying oral communication skills. Multiliteracy, which underpins the proposed framework, encompasses the use of language in various forms of communication, including spoken, written, and signed modalities. What sets this model apart from other communication frameworks lies in its definition and measurement of communication goals. Unlike conventional models, this framework prioritizes meaning-oriented goals. Despite change concerns, leveraging communities and delineating performance indicators for assessment purposes can provide teachers with valuable tools (see Humphrey, 2020). To make sense of both meaning and pattern goals, an envisioned hierarchical model is established, wherein meaning-value goals are stratified according to their degree of traditionality. Accordingly, teachers can evaluate performance across different levels via texts, theories, values, concepts, and real-life experiences of individuals, both personal and external (see Kumar, 2021). By harnessing technology, it becomes conceivable to intertwine modes and genres in digital hypertext, thereby facilitating the creation of persuasive written material, in contrast to the current predominant focus on argument technology, which largely assesses persuasion alone.

To enhance the emphasis approaches to assessing multiliteracies the updated portion of the content will include hands-on resources and tactics to implement them into practice. A significant enhancement involves presenting guidelines that teachers can utilize to evaluate projects involving modes of communication. These guidelines will consider factors like originality and organization of ideas, expertise, and analytical thinking abilities providing

benchmarks for grading students' work, in different forms of expression. Furthermore. In addition, to that point raised earlier on about the SAMr model (standing for Substitution, Augmentation, Modification, Redefinition) it is important to note that educators can leverage frameworks as a structured method to evaluate the impact of technology integration on evolving traditional literacy practices into broader multi literacy results.

One useful approach to consider is using portfolio evaluation techniques, like portfolios that help students display their development in various literacy skills over a period effectively and in an organized manner. These portfolios assist educators in assessing improvements in areas such as creating content using modes of communication and problem-solving abilities while working collaboratively with others. For example, the utilization of tools, such as Google Workspace or Canva gives students the ability to construct and manage these portfolios by integrating text and interactive features alongside images and videos into projects.

To address the need for more specific examples, the section will include case studies highlighting the application of tools like the Measure of Educational Growth in English (MEG-E). These examples will illustrate how MEG-E evaluates reasoning, writing, reading, and communication skills in diverse contexts. Furthermore, technologies such as Turnitin, which tracks originality and coherence in digital writing, or collaborative platforms like Padlet, can be used to assess student work within the framework of multiliteracies. These tools make it possible to evaluate not only individual contributions but also the collaborative and multimodal integration skills essential to multiliteracies.

Finally, this section connects the ideas to practical applications by translating the hierarchical model of meaning-value goals into actionable steps for educators. For instance, teachers can use tiered levels of evaluation to assess how well students connect traditional and digital texts meaningfully. Tools like Canva for multimodal design assignments or Google Slides for hyperlinked presentations offer concrete ways to implement these tiers. By providing these practical methods, the section will ensure that educators have the tools needed to effectively assess multiliteracies in real-world educational settings, bridging theoretical discussions with actionable insights.

6.1. Measuring multiliteracy skills

To date, evidence of how educational interventions and children's out-of-school activities affect the development of such new skills, along with large-scale patterns of variation in these skills, is very preliminary. Much of the empirical work is still fragmented, small-scale, and exploration. Research to measure specific skills is needed. Another challenge is to derive measures that are comprehensive enough to capture a multidisciplinary and very wide-ranging understanding of digital literacy, involving insights from computer and network science, information science, media, and communication studies, sociology, economics and cultural studies, and education. Measures are also needed that both gauge the skills that young children already have before reaching school, underlining the importance of children's home activities, and evaluate the broader conception of digital literacy proposed in this article, encompassing types of proficiency extending well beyond the range commonly assessed in computer literacy tests. Research has therefore tested adolescents' computer and conventional reading literacy concerning their influence on ICT use, interpreting the findings in the context of a digital divide (Hu & Yu, 2021). Broad definitions have been adopted, considering the use of games and educational software in addition to internet access and email, and conclusions about netbooks and broadband policies in education have been drawn. Researchers have also focused on the

home, extending national skill assessments to adults and teenage children while designating children's digital attitudes and expectations for development. Repeated PIRLS measures of children's computer and informational literacy have shown statistical associations with their recreational access to television, computers, and the internet. However, no usage measure has been adopted (Felix et al., 2020).

However, another scholar has codeveloped a measure for boys' and girls' computer knowledge and application proficiency. However, to date, none of these related studies have approached skill assessment directly, proposing multimodal and multidimensional approaches to digital literacy. Given the complex, dynamic, and variable landscape of young children's emerging multiliteracies, tests for them would need to be sensitive to both changing learning outcomes and different learning contexts (see Tan et al., 2020). Therefore, it is crucial to conduct further research that expands on and refines the existing measures, taking into consideration the diverse factors influencing the development of digital literacy skills among young children and the ever-evolving digital landscape they encounter.

7. Challenges and opportunities in multiliteracies

The focus on multimodal texts, which include various modes such as visual image, layout, color, and sound, raises important questions about language and literacy teaching and the nature of literacy itself. These texts offer more than just language, as they utilize multiple modes to convey meaning, each making its contribution to the overall message, which challenges traditional language-focused approaches that may overlook the richness of meaning-making resources available in different cultural contexts, and these resources are also constantly evolving with new technologies (Guerrettaz et al., 2021). In addition to theoretical questions, pedagogy has implications for multimodal texts in which digital technology provides language teachers with a wealth of possibilities for selecting and composing different modes of meaning-making, including text, sound, and various types of images (see Sastre et al., 2022). However, many traditional language and literacy programs have not fully embraced this flexibility (Woodard & Rao, 2020). Instead, they often prioritize written print text as the primary mode, viewing digital technology as an opportunity rather than a means of enrichment. Educators need to recognize that there are additional meaning-making resources beyond just words. Gestures, posture, gaze, facial expressions, and the way visual images are manipulated and presented all play a role in conveying meaning. Multiliteracies pedagogy highlights the need to consider these resources concerning the overall composition of meaning, the cultural assumptions and values embedded in the available resources, and the communicators' perspective and relationship with their audiences (see Yap & Gurney, 2023).

In light of these considerations, language teachers must explore new pedagogical approaches that embrace the wide range of aims and activities made possible by digital technology. This involves moving away from only concentrating on traditional written text and toward a more comprehensive approach that utilizes various types of resources. Educators can develop language and literacy programs that are more interesting and successful by incorporating the changing ways we communicate in today's highly technological society.

7.1. Barriers to multiliteracies adoption

It aims to passionately advocate for the wide implementation of multiliteracies in both second and foreign-language curricula, recognizing its immense significance in preparing learners for the complexities of our globalized world (see Holloway & Gouthro, 2020). However, it is of utmost importance that we, as educators, critically examine our discipline and identify the

various obstacles that hinder the smooth integration of multiliteracies (Ticheloven et al., 2019). In this context, there are three distinct levels of resistance that we confront when we seek to embrace multiliteracies. The first level of resistance concerns the issue of awareness. Currently, one of the prominent challenges lies in the lack of knowledge regarding the affordance-developmental paradigm associated with literacy, as well as the specific manifestations of new literacies that are rapidly emerging (Habermas & Bongard, 2024). To address this, we believe that comprehensive preservice training for teachers at all levels is crucial because teachers must become acutely aware of the concept of multiliteracies and possess a solid understanding of the theoretical framework that underpins an effective 'pedagogy of multiliteracies. Moving on to the second level of resistance, we encounter a more technical hurdle, which pertains to the less familiar and less utilized features of screens and multimedia activities, particularly the extensive designer functions they offer (Clark & Mayer, 2023). These functions give rise to the creation of unique and often unconventional linguistic elements such as phonology, lexicogrammar, and discourse, which form the basis of this emerging and future-oriented form of basic literacy. For teachers who are less technologically literate, this presents a significant demand. Not only are they expected to be literate in these areas themselves, but they also have the responsibility of guiding their students through this new realm of basic literacy. However, it is worth noting that many students, being digital natives, are often more adept and knowledgeable in cyberspace and its associated functions than their teachers are, this dynamic gives rise to a potential shift in authority, where expertise on these genres and the associated topics emerges from the context itself (Jones et al., 2020).

By continuously delving into the intricacies of multiliteracies and addressing barriers, we have identified and strived to create an inclusive and empowering educational environment that equips learners with the skills and competencies required to excel in the digital age such that, through our collective efforts and commitment to innovation, we can cultivate a generation of multiliterate individuals capable of navigating and thriving in our rapidly evolving world. In addition, to overcome the obstacles mentioned in this section and to make the suggestions more practical for educators who may not be well-versed in multiliteracies a set of strategies will be implemented. These strategies will address the three areas of resistance which include awareness issues, difficulties, and changes in authority. To tackle the awareness hurdle there will be an emphasis placed on training programs for pre-in-service teachers. These programs will aim to introduce the concept of multiliteracies along with its foundations while also showcasing real-world applications, in classroom settings. One way to approach this is by organizing workshops and training sessions for educators to learn about the pedagogy of multiliteracies and how it can be incorporated into language teaching programs, for both foreign languages. Moreover, establishing communities or platforms where teachers can exchange ideas and resources could foster a network that enhances understanding and expertise. Furthermore, to address technical challenges, targeted technological training sessions will be proposed. These sessions should focus on teaching educators to use screen-based tools, multimedia platforms, and designer functions effectively. For instance, introducing simple, user-friendly tools like Canva, Padlet, or Microsoft Sway can help educators create and implement multimodal content without requiring advanced technical expertise. Providing step-by-step guides and offering ongoing technical support can also alleviate apprehension among less technologically literate educators. Moreover, emphasizing the co-learning dynamic, where educators collaborate with tech-savvy students, can create a mutually beneficial learning environment and reduce the perceived gap in authority. For the shift in authority and expertise, strategies to empower educators and embrace collaborative teaching dynamics will be highlighted. Teachers could be motivated to take on a facilitator role by guiding students in thinking skills and ethical use of tools while also focusing on effective communication instead

of just presenting information to them outright. Collaborative projects where educators and students delve into new digital genres together have the potential to build mutual respect and shared knowledge. For instance, incorporating student-led workshops or peer-teaching sessions can allow students to share their knowledge of digital tools while enabling teachers to focus on framing these tools within broader literacy goals.

By integrating these strategies, the section will provide educators with actionable recommendations to overcome barriers to multiliteracies adoption. These practical steps not only address resistance but also empower educators to build confidence and competence in implementing multiliteracies in their classrooms, ensuring a more inclusive and adaptive educational environment.

8. Conclusion and future directions

In this chapter, we have thoroughly examined and analyzed the profound and intricate shifts in communication, identity, and significance that emerge as a direct consequence of transformative changes in the expansive communication and multimodal landscape while remaining acutely aware of the underlying ideological and social conditions that shape such developments. It is with great emphasis and unwavering conviction that we assert our resolute support for the paramount notion that to effectively educate individuals in contemporary society in diverse cultural, rhetorical, and multimodal domains, it is imperative to incorporate an integrative framework of design and critique underpinned by comprehensive theoretical foundations and explicit instruction. We bolster our robust argument with a plethora of compelling examples, thereby underscoring the immense potential and power that lies within the realm of seamlessly integrating multimodal curriculum models and establishing a specialized English course specifically tailored to address the multifaceted demands of the rapidly evolving digital era. Moreover, we have unreservedly underscored the ever-growing importance and urgency of implementing educational reforms that inherently foster and cultivate exceptional writing skills within an innovative design-to-effect approach, all while engendering a deep-rooted comprehension and mastery of critical theory. Despite various critiques that may arise, we humbly recognize and acknowledge the deliberate and meticulously enlightening nature of our pedagogical endeavors, standing unwaveringly behind our beliefs. It is with an invigorating sense of optimism and unwavering hope that we contemplate the future, firmly convinced that our approach is not only grounded in sound reasoning but also holds immense promise in shaping the educational landscape and nourishing the intellectual growth and potential of countless individuals in an ever-evolving world.

8.1. The role of multiliteracies in shaping education

The multiliteracies approach signifies a change in how we perceive literacy by broadening its scope from cognitive skills to including socially embedded practices. In this perspective literacy encompasses more than reading and writing; it also involves the skill to navigate and analyze forms of communication within diverse social and cultural settings. To be truly literate in today's paced and interconnected world. One must not excel in communication skills like speaking and writing. Also adapt to competencies, in digital media and social interaction. This broader perspective underscores the importance of methods that equip students to participate actively in evolving communication environments. The essence of multiliteracies underscores the examination, assessment, and construction of significance which transcends the interpretation and production of messages. The significance of semiotics takes on a role in comprehending how existing frameworks for meaning promote communication. This broader viewpoint also broadens the concept of literacy from a societal activity to a political one having

substantial ramifications, for inclusivity and fairness. Highlighting concerns related to power imbalances and the gap in skills and resources is crucial in emphasizing the need for access to communication technologies and online literacy, for everyone's benefit.

Educators need to rethink their teaching methods to incorporate strategies that bridge theory and real-world practice when embracing multiliteracies in education. The integration of tools and media in learning activities should be a focus in the curriculum to empower students to express themselves and collaborate on projects together. Creating stories or analyzing social media campaigns are a few examples of tasks that not only improve communication abilities but also stimulate critical thinking and creativity. Teachers should receive support through training to help them utilize digital tools effectively in their teaching practices. Platforms, like Canva and Google Sites, offer entry points for incorporating technology in the classroom. Moreover, emphasizing thinking and ethical use of technology is crucial in multiliteracies education. Students should be given chances to assess information credibility, recognize biases, and grasp the considerations related to their interactions, on platforms. These abilities are crucial not only for communicating but also for nurturing knowledgeable and conscientious members of society in a digitally connected world. Simultaneously we must take steps to tackle disparities in technology access. Closing the gap in access necessitates strategies and programs like collaborations between schools and local groups to offer gadgets and internet access to marginalized communities.

Multiliteracies also require teachers to adopt inclusive teaching methods that acknowledge the interconnectedness of communication styles and trends. Encouraging teamwork and student-led talks can establish environments where learners, from language backgrounds can exchange their viewpoints. These approaches aid in nurturing students' knowledge of concerns nuancedly while promoting empathy and teamwork—qualities, for excelling in a diverse and digitally linked society. Essentially speaking the multiliteracies approach disrupts ideas about literacy. Requires educators to embrace a wider and more vibrant perspective on teaching and learning. By blending forms of communication, tackling obstacles, and arming learners with crucial and imaginative abilities education can ready individuals to navigate the intricacies of the globalized digital era. This comprehensive structure not only enables students to participate in the changing realm of knowledge actively but also encourages them to play a role in generating and sharing information effectively. Ultimately, connecting theory and practical application in impactful ways.

Acknowledgments

The authors would like to express their deepest thankfulness to blind reviewers and the editorial team of CJESS for making this article appear in the scholarly world. Without their contributions, this article would not have appeared. Therefore, their contributions are considered irreplaceable and helpful for the whole society, especially the scholar society of research and publication.

Conflict of interest

No potential conflict of interest was reported by the authors.

Funding

The authors received no financial support for the study, authorship, and/or publication of this article.

Declaration of AI usage

The authors used ChatGPT and QuillBot to polish the language in some parts of the article. However, they declared that the content of the article is totally theirs.

References

- Aguilera, E., & Pandya, J. Z. (2021). Critical literacies in a digital age: Current and future issues. *Pedagogies: An International Journal*, 16(2), 103–110. <https://doi.org/10.1080/1554480x.2021.1914059>
- Anurogo, D., Hardin La, R., Nabila Diyana, P., & Ulfah Mahardika Pramono, P. (2023). Digital literacy 5.0 to enhance multicultural education. *Multicultural Islamic Education Review*, 1(2), 109–179. <https://doi.org/10.23917/mier.v1i2.3414>
- Bland, J. (2022). *Compelling stories for English language learners: Creativity, interculturality and critical literacy*. Bloomsbury Publishing.
- Boettcher, J. V., & Conrad, R.-M. (2021). *The online teaching survival guide: Simple and practical pedagogical tips*. John Wiley & Sons.
- Breuer, E. O., & Van Steendam, E. (2021). Multiple approaches to understanding and working with multilingual (multi) literacy. *Multilingual Literacy*, 1–18. <https://doi.org/https://doi.org/10.21832/9781800410701-002>
- Buckingham, D. (2020). Epilogue: Rethinking digital literacy: Media education in the age of digital capitalism. *Digital Education Review* (37), 230–239. <https://doi.org/10.1344/der.2020.37.230-239>
- Buehl, D. (2023). *Developing readers in the academic disciplines*. Routledge. <https://doi.org/10.4324/9781032680996>
- Campbell, C., & Olteanu, A. (2023). The challenge of postdigital literacy: Extending multimodality and social semiotics for a new age. *Postdigital Science and Education*, 6(2), 572–594. <https://doi.org/10.1007/s42438-023-00414-8>
- Chambers, D., & Forlin, C. (2021). A historical review from exclusion to inclusion in Western Australia across the past five decades: What have we learned? *Education Sciences*, 11(3), 1–15. <https://doi.org/10.3390/educsci11030119>
- Chen, S. (2023). *Music as a bridge to literacy and multiliteracies development for second language learners* [Master thesis]. University of Windsor.
- Chuang, Y., Ueng, F.-B., & Shen, Y.-S. (2020). A cyclic prefix-free multiple input multiple output generalized frequency division multiplexing system design. *Wireless Personal Communications*, 117(2), 311–336. <https://doi.org/10.1007/s11277-020-07870-6>
- Clark, R. C., & Mayer, R. E. (2023). *E-learning and the science of instruction: Proven guidelines for consumers and designers of multimedia learning*. John Wiley & Sons. <https://dl.acm.org/doi/10.1016/j.procs.2024.03.176>
- Colomer, J., Serra, T., Cañabate, D., & Bubnys, R. (2020). Reflective learning in higher education: Active methodologies for transformative practices. *Sustainability*, 12(9), 1–8. <https://doi.org/10.3390/su12093827>
- Comunian, R., & England, L. (2020). Creative and cultural work without filters: Covid-19 and exposed precarity in the creative economy. *Cultural Trends*, 29(2), 112–128. <https://doi.org/10.1080/09548963.2020.1770577>
- Cope, B., & Kalantzis, M. (2001). Multiliteracies: The beginnings of an idea. In B. Cope & M. Kalantzis (Eds.), *Multiliteracies: Literacy learning and the design of social futures* (pp. 659–668). Routledge. <https://cir.nii.ac.jp/crid/1130000797513202048>

- Darvin, R. (2023). Moving across a genre continuum: Pedagogical strategies for integrating online genres in the language classroom. *English for Specific Purposes*, 70, 101–115. <https://doi.org/10.1016/j.esp.2022.11.004>
- Davis, G. V., & Jelinek, H. M. (2022). *Crisis and creativity in the new literature in English*. BRILL. <https://cir.nii.ac.jp/crid/1130000796093450368>
- 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. (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., Chin, P., & Pen, D. (2024). COVID-19 and school closures: Transformation of shadow education in the Cambodian context. In M. A. Bayezid (Ed.), *Shadow Education in Asia: Policies and Practices* (pp. 136–159). IGI Global. <https://doi.org/DOI:10.4018/979-8-3693-2952-8.ch009>
- Em, S., Phann, S., & Khan, S. (2022). Cambodian EFL university students' perceptions of online learning effectiveness during the COVID-19 pandemic: A survey study. *Cambodian Journal of Educational Research*, 2(2), 15-34. <https://doi.org/10.62037/cjer.2022.02.02.02>
- Felix, E., Silva, V., Caetano, M., Ribeiro, M. V. V., Fidalgo, T. M., Rosa Neto, F., Sanchez, Z. M., Surkan, P. J., Martins, S. S., & Caetano, S. C. (2020). Excessive screen media use in preschoolers is associated with poor motor skills. *Cyberpsychol Behav Soc Netw*, 23(6), 418–425. <https://doi.org/10.1089/cyber.2019.0238>
- Fleming, E. C., Robert, J., Sparrow, J., Wee, J., Dudas, P., & Slattery, M. J. (2021). A digital fluency framework to support 21st-century skills. *Change: The Magazine of Higher Learning*, 53(2), 41–48. <https://doi.org/10.1080/00091383.2021.1883977>
- Fradd, S. H. (1981). Literacy and school. In J. T. Guthrie (Ed.), *Comprehension and teaching: Research reviews*. International Reading Association.
- Freitag, C., Berners-Lee, M., Widdicks, K., Knowles, B., Blair, G. S., & Friday, A. (2021). The real climate and transformative impact of ICT: A critique of estimates, trends, and regulations. *Patterns (N Y)*, 2(9), 1–20. <https://doi.org/10.1016/j.patter.2021.100340>
- Gates, V. P. (2020). *Cultural practices of literacy: Case studies of language, literacy, social practice, and power*. Routledge. <https://cir.nii.ac.jp/crid/1130282269240381312>
- Gaytan, S. F., Aguaded, I., & Ramirez-Montoya, M.-S. (2021). Transformation and digital literacy: Systematic literature mapping. *Education and Information Technologies*, 27(2), 1417–1437. <https://doi.org/10.1007/s10639-021-10624-x>
- Guerrettaz, A. M., Engman, M. M., & Matsumoto, Y. (2021). Empirically defining language learning and teaching materials in use through socio-material perspectives. *The Modern Language Journal*, 105(S1), 3–20. <https://doi.org/10.1111/modl.12691>
- Habermas, T., & Bongard, S. (2024). Narrating anger appropriately: Implications for narrative form and successful coping. *Emotion Review*, 16(4), 238–251. <https://doi.org/10.1177/17540739241230817>
- 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>
- Hoff, H. E. (2020). The evolution of intercultural communicative competence: Conceptualizations, critiques, and consequences for 21st century classroom practice. *Intercultural Communication Education*, 3(2), 55–74. <https://doi.org/10.29140/ice.v3n2.264>

- Holloway, S. M., & Gouthro, P. A. (2020). Using a multiliteracies approach to foster critical and creative pedagogies for adult learners. *Journal of Adult and Continuing Education*, 26(2), 203–220. <https://doi.org/10.1177/1477971420913912>
- Hong, A. L., & Hua, T. K. (2020). A review of theories and practices of multiliteracies in the classroom: Issues and trends. *International Journal of Learning, Teaching and Educational Research*, 19(11), 41–52. <https://doi.org/10.26803/ijlter.19.11.3>
- Hu, J., & Yu, R. (2021). The effects of ICT-based social media on adolescents' digital reading performance: A longitudinal study of PISA 2009, PISA 2012, PISA 2015 and PISA 2018. *Computers & Education*, 175, 1–20. <https://doi.org/10.1016/j.compedu.2021.104342>
- Humphrey, S. (2020). The role of teachers' disciplinary semiotic knowledge in supporting young bi/multilingual learners' academic and reflexive multiliteracies. *Language and Education*, 35(2), 140–159. <https://doi.org/10.1080/09500782.2020.1772282>
- 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>
- Imamov, M., & Semenikhina, N. (2021). The impact of the digital revolution on the global economy. *Linguistics and Culture Review*, 5(S4), 968–987. <https://www.neliti.com/publications/508177/the-impact-of-the-digital-revolution-on-the-global-economy>
- Jensen, K. B. (2022). *Media convergence: The three degrees of network, mass, and interpersonal communication*. Routledge. <https://doi.org/10.4324/9781003199601>
- Jones, P., Turney, A., Georgiou, H., & Nielsen, W. (2020). Assessing multimodal literacies in science: Semiotic and practical insights from preservice teacher education. *Language and Education*, 34(2), 153–172. <https://doi.org/10.1080/09500782.2020.1720227>
- Jones, R. H., & Hafner, C. A. (2021). *Understanding digital literacies: A practical introduction*. Routledge.
- Kateryna, A., Oleksandr, R., Mariia, T., Iryna, S., Evgen, K., & Anastasiia, L. (2020). Digital literacy development trends in the professional environment. *International Journal of Learning, Teaching and Educational Research*, 19(7), 55–79. <https://doi.org/10.26803/ijlter.19.7.4>
- Ke, L., Sadler, T. D., Zangori, L., & Friedrichsen, P. J. (2021). Developing and using multiple models to promote scientific literacy in the context of socioscientific issues. *Sci Educ (Dordr)*, 30(3), 589–607. <https://doi.org/10.1007/s11191-021-00206-1>
- Kellner, D., & Kellner, D. (2021). Digital Technologies, Multi-Literacies, and Democracy: Toward a Reconstruction of Education. In D. Kellner (Ed.), *Technology and Democracy: Toward A Critical Theory of Digital Technologies, Technopolitics, and Technocapitalism* (pp. 257–287). https://doi.org/10.1007/978-3-658-31790-4_10
- Kumar, D. (2021). *Mass media and communications: Theory and practice*. KK Publications.
- Landfester, U., & Metelmann, J. (2020). The value of doubt: Humanities-based literacy in management education. *Humanistic Management Journal*, 5(2), 159–175. <https://doi.org/10.1007/s41463-020-00097-4>
- Lee, S.-Y., Lo, Y.-H. G., & Chin, T.-C. (2019). Practicing multiliteracies to enhance EFL learners' meaning-making process and language development: A multimodal problem-based approach. *Computer Assisted Language Learning*, 34(1-2), 66–91. <https://doi.org/10.1080/09588221.2019.1614959>
- Liu, Z.-J., Tretyakova, N., Fedorov, V., & Kharakhordina, M. (2020). Digital literacy and digital didactics as the basis for new learning model development. *International*

- Journal of Emerging Technologies in Learning (iJET)*, 15(14), 1–15.
<https://doi.org/10.3991/ijet.v15i14.14669>
- Manca, S., Bocconi, S., & Gleason, B. (2021). “Think globally, act locally”: A glocal approach to the development of social media literacy. *Computers & Education*, 160, 1–17. <https://doi.org/10.1016/j.compedu.2020.104025>
- Mizusawa, K., & Kiss, T. (2020). Connecting multiliteracies and writing pedagogy for 21st century English language classrooms: Key considerations for teacher education in Singapore and beyond. *Journal of Nusantara Studies (JONUS)*, 5(2), 192–214.
<https://doi.org/10.24200/jonus.vol5iss2pp192-214>
- Modderkolk, L., van Meurs, J., de Klein, V., Engels, Y., & Wichmann, A. B. (2023). Effectiveness of meaning-centered coaching on the job of oncology nurses on spiritual care competencies: A participatory action research approach. *Cancer Nurs*, 1–11. <https://doi.org/10.1097/NCC.0000000000001255>
- Morgan, A.-M., Comber, B., Freebody, P., & Nixon, H. (2014). *Literacy in the middle years: Learning from collaborative classroom research*. Primary English Teaching Association Australia (PETAA).
- Nichols, T. P., & LeBlanc, R. J. (2021). Media education and the limits of “Literacy”: Ecological orientations to performative platforms. *Curriculum Inquiry*, 51(4), 389–412. <https://doi.org/10.1080/03626784.2020.1865104>
- Noordegraaf, M. (2020). Protective or connective professionalism? How connected professionals can (still) act as autonomous and authoritative experts. *Journal of Professions and Organization*, 7(2), 205–223. <https://doi.org/10.1093/jpo/joaa011>
- Oh, S. S., Kim, K. A., Kim, M., Oh, J., Chu, S. H., & Choi, J. (2021). Measurement of digital literacy among older adults: Systematic review. *J Med Internet Res*, 23(2), 1–15.
<https://doi.org/10.2196/26145>
- Palviainen, Å., & Kędra, J. (2020). What’s in the family app? *Journal of Multilingual Theories and Practices*, 1(1), 89–111. <https://doi.org/10.1558/jmtp.15363>
- Park, H., Kim, H. S., & Park, H. W. (2021). A scientometric study of digital literacy, ICT literacy, information literacy, and media literacy. *Journal of Data and Information Science*, 6(2), 116–138. <https://doi.org/10.2478/jdis-2021-0001>
- Pederson, R. (2023). An argument for including critical media literacy in EFL curriculum and pedagogy. *English Teaching*, 78(1), 169–195.
<https://doi.org/https://doi.org/10.15858/engtea.78.1.202303.169>
- Pereira, Í. S. P. (2020). A multiliteracies approach to online reading to learn: a case study. *Pedagogies: An International Journal*, 17(2), 119–138.
<https://doi.org/10.1080/1554480x.2020.1826946>
- Pereira, Í. S. P., Gil, M., & Bunzen, C. (2023). Wordless picturebooks as resources for the construction of the pedagogy of multiliteracies. The case of migrants, by Issa Watanabe. *Children's Literature in Education*, 15(14), 1–22.
<https://doi.org/10.1007/s10583-023-09544-w>
- Peters, C., Schröder, K. C., Lehaff, J., & Vulpius, J. (2021). News as they know it: Young adults’ information repertoires in the digital media landscape. *Digital Journalism*, 10(1), 62–86. <https://doi.org/10.1080/21670811.2021.1885986>
- Polizzi, G. (2020). Digital literacy and the national curriculum for England: Learning from how the experts engage with and evaluate online content. *Computers & Education*, 152, 1–13. <https://doi.org/10.1016/j.compedu.2020.103859>
- Pressley, T., Allington, R. L., & Pressley, M. (2023). *Reading instruction that works: The case for balanced teaching*. Guilford Publications.
- Rajendram, S. (2020). A pedagogy of multiliteracies and its role in English language education. In P. Vinogradova & J. K. Shin (Eds.), *Contemporary foundations for*

- teaching English as an additional language* (pp. 151–187). Routledge.
<https://doi.org/https://doi.org/10.4324/9780429398612>
- Ray, J. J. (2023). *Evaluating knowledge transfer during computer-mediated communications*. Drexel University. <https://doi.org/10.17918/00001615>
- Richards, J. C., & Pun, J. (2021). A typology of English-medium instruction. *RELC Journal*, 54(1), 216–240. <https://doi.org/10.1177/0033688220968584>
- Rothenberger, L. (2023). Theoretical conclusions and practical implications. In L. Rothenberger (Ed.), *Terrorism as communication: Stocktaking, explanations and challenges* (pp. 335–362). Springer. https://doi.org/https://doi.org/10.1007/978-3-658-38242-1_6
- Sastre, M. S., Pifarre, M., Cujba, A., Cutillas, L., & Falguera, E. (2022). The role of digital technologies to promote collaborative creativity in language education. *Front Psychol*, 13, 1–13. <https://doi.org/10.3389/fpsyg.2022.828981>
- Smuts, H., & Merwe, A. V. d. (2022). Knowledge management in society 5.0: A sustainability perspective. *Sustainability*, 14(11), 1–27. <https://doi.org/10.3390/su14116878>
- Soltovets, E., Chigisheva, O., & Dmitrova, A. (2020). The role of mentoring in the digital literacy development of Doctoral students at British universities. *EURASIA Journal of Mathematics, Science and Technology Education*, 16(4), 1–13. <https://doi.org/10.29333/ejmste/117782>
- Szymkowiak, A., Melović, B., Dabić, M., Jeganathan, K., & Kundi, G. S. (2021). Information technology and Gen Z: The role of teachers, the internet, and technology in the education of young people. *Technology in Society*, 65, 1–10. <https://doi.org/10.1016/j.techsoc.2021.101565>
- Tan, L., Zammit, K., D'warte, J., & Gearsides, A. (2020). Assessing multimodal literacies in practice: A critical review of its implementations in educational settings. *Language and Education*, 34(2), 97–114. <https://doi.org/10.1080/09500782.2019.1708926>
- Tang, K.-S., & Rappa, N. A. (2020). The role of metalanguage in an explicit literacy instruction on scientific explanation. *International Journal of Science and Mathematics Education*, 19(7), 1311–1331. <https://doi.org/10.1007/s10763-020-10121-6>
- Teale, W. H., Whittingham, C. E., & Hoffman, E. B. (2018). Early literacy research, 2006–2015: A decade of measured progress. *Journal of Early Childhood Literacy*, 20(2), 169–222. <https://doi.org/10.1177/1468798418754939>
- Tejedor, S., Cervi, L., Pérez-Escoda, A., & Jumbo, F. T. (2020). Digital literacy and higher education during COVID-19 lockdown: Spain, Italy, and Ecuador. *Publications*, 8(4), 1–17. <https://doi.org/10.3390/publications8040048>
- Thompson, J. B. (2018). Mediated interaction in the digital age. *Theory, Culture & Society*, 37(1), 3–28. <https://doi.org/10.1177/0263276418808592>
- Ticheloven, A., Blom, E., Leseman, P., & McMonagle, S. (2019). Translanguaging challenges in multilingual classrooms: scholar, teacher and student perspectives. *International Journal of Multilingualism*, 18(3), 491–514. <https://doi.org/10.1080/14790718.2019.1686002>
- Troike, M. S. (1978). *A guide to culture in the classroom*. National Clearinghouse for Bilingual Education Rosslyn.
- Unrau, N. J., Alvermann, D. E., & Sailors, M. (2018). Literacies and their investigation through theories and models. In D. E. Alvermann, N. J. Unrau, M. Sailors, & R. B. Ruddell (Eds.), *Theoretical models and processes of literacy* (7 ed., pp. 3–34). Routledge.

- Vogel, S., Hoadley, C., Castillo, A. R., & Ascenzi-Moreno, L. (2020). Languages, literacies, and literate programming: Can we use the latest theories on how bilingual people learn to help us teach computational literacies? *Computer Science Education*, 30(4), 420–443. <https://doi.org/10.1080/08993408.2020.1751525>
- Wartofsky, M. G. (2020). *No Sanctuary: The Making of Mass Deportation and the Unmaking of the Sanctuary City, 1980-2020* [Doctoral Thesis, New York University]. ProQuest Dissertations & Theses.
- Webb, A., & Layton, J. (2022). Digital skills for performance: A framework for assessing current and future digital skills needs in the performing arts sector. *Arts and the Market*, 13(1), 33–47. <https://doi.org/10.1108/aam-09-2021-0054>
- Won, S., Kapil, M. E., Drake, B. J., & Paular, R. A. (2023). Investigating the role of academic, social, and emotional self-efficacy in online learning. *The Journal of Experimental Education*, 92(3), 485–501. <https://doi.org/10.1080/00220973.2023.2183375>
- Woodard, R., & Rao, A. (2020). Tensions and possibilities in fostering critical language ideologies in elementary teacher education. *Studying Teacher Education*, 16(2), 183–203. <https://doi.org/10.1080/17425964.2020.1742106>
- Yap, J. R., & Gurney, L. (2023). Exploring practices of multiliteracies pedagogy through digital technologies: A narrative inquiry. *Literacy*, 57(3), 292–304. <https://doi.org/10.1111/lit.12335>
- Yuan, R., Lee, I., De Costa, P. I., Yang, M., & Liu, S. (2022). TESOL teacher educators in higher education: A review of studies from 2010 to 2020. *Language Teaching*, 55(4), 434–469. <https://doi.org/10.1017/s0261444822000209>
- Zhang, D., & Zou, Y. (2020). Fostering multiliteracies through blended EFL learning. *International Journal of Linguistics, Literature and Translation*, 3(2), 40-48. <https://doi.org/10.32996/ijllt.2020.3.2.5>

L2 speaking confidence of Indonesian senior high school learners: Influence on willingness to communicate

Wendy Fernando¹, Adaninggar Septi Subekti²

^{1,2} Universitas Kristen Duta Wacana, Yogyakarta, Indonesia

Article info

Article history

Received: December 18, 2024

Revised: April 3, 2025

Accepted: April 10, 2025

Keywords

Second/foreign language (L2)

Senior high school learners

Speaking confidence

Willingness to communicate
(WTC)

Article type

Research article

Abstract

The present study investigated Indonesian senior high school learners' level of second/foreign language (L2) speaking confidence and the influence of this confidence on their L2 Willingness to Communicate (WTC). To this end, this study employed an online survey method using Google Forms. 159 learner participants from more than six islands in Indonesia participated in this study. It found that generally, learners reported a moderate level of L2 speaking confidence. They had a moderately high perception of competence, were moderately enthusiastic about using English in communication, and had generally positive feelings when using English. This study further found a statistically significant, positive predictive power of learners' L2 speaking confidence on their L2 WTC. L2 confidence accounted for 30% of the total variance in L2 WTC. Implications include the suggestion that teachers create a supportive environment that boosts learners' confidence and minimises negative emotions like anxiety through well-informed daily teaching practices. Suggested future studies include investigations on how certain instructional practices negatively or positively affect confidence and WTC.

This is an open-access article under the [CC BY-SA](#) license.



Corresponding Author

Adaninggar Septi Subekti

Universitas Kristen Duta Wacana, Jalan dr. Wahidin Sudirohusodo 5-25 Yogyakarta, 55224, Indonesia

E-mail address: adaninggar@staff.ukdw.ac.id

1. Introduction

This section introduces the research background, gaps, objectives, and questions as well as the significance of the present study.

1.1. Background information

Among activities in a second/foreign language (L2) intended to sharpen learners' language skills, namely reading, listening, writing, and speaking, speaking activities seem to make learners feel anxious the most (Steinberg & Horwitz, 1986; Tsiplakides & Keramida, 2009). That speaking being the most anxiety-provoking may be especially true because spoken interactions are inherently so complex and unpredictable that they are tricky to control (Richards, 2006). For this reason, learners' L2 speaking confidence becomes very important. It creates courage, enthusiasm, and stimulation for learners, and thus, learners with a high L2 speaking confidence can communicate more optimally than other learners with lower confidence (Liandika, 2021; Roysmanto, 2018). Learners' self-confidence is especially

important in the case of L2 learning because learners face continuous trials and errors, experiencing both success and failure (Shelton-Strong & Mynard, 2020). A study in Hong Kong also reported that a lack of speaking confidence was a serious issue hampering L2 learners of English at the university level (Evans & Green, 2007).

Furthermore, L2 speaking confidence could be an important antecedent of L2 willingness to communicate (WTC). L2 WTC is learners' "readiness to enter into discourse at a particular time with a specific person or persons, using an L2" (MacIntyre et al., 1998, p. 547). With L2 instruction focusing on the communicative aspects of language used in communication, L2 WTC is considered the closest determinant of whether L2 learners use L2 (Clément et al., 2003). Quite strongly, MacIntyre et al. (1998) argued that the primary objective of any L2 instruction should be to improve learners' L2 WTC. Only then will the taught L2 be put into use in real communications. That is because L2 WTC is regarded as "the most immediate determinant of L2 use" (Clément et al., 2003, p. 191), leading to better communicative language attainment (Amiryousefi, 2016).

Due to the importance of both L2 confidence and WTC in L2 learning, it becomes important to investigate these two constructs and contemplate the possible interaction between them.

1.2. Research gap

Despite the importance of L2 confidence and WTC in L2 learning, and the availability of such studies in Indonesia (Aritonang, 2014; Dewi & Subekti, 2024b; Hadi et al., 2021; Lee & Drajiati, 2019; Liandika, 2021; Muin & Aswati, 2019; Roysmanto, 2018; Sari, 2018; Suseno & Rasul, 2022; Tridinanti, 2018), several gaps must be addressed. First, most studies in Indonesia solely investigated their respective participants' confidence using qualitative designs or investigated confidence along with other variables such as anxiety. Only the study by Lee and Drajiati (2019) tried to contemplate the possible interaction between L2 confidence and L2 WTC, where they found a significant, positive, and moderate relationship between L2 confidence and L2 WTC. Next, to the best of our knowledge, no quantitative study has yet contemplated whether Indonesian senior high school learners' L2 confidence influenced L2 WTC. English is a foreign language in Indonesia, and there is limited English class time at the high school level in the country. As such, L2 learners at high school level may not have sufficient exposure to English and may use the language limitedly, thus potentially affecting their L2 confidence and WTC. By involving sufficient samples of these high school learner participants, such a study may provide generalisable data on the interaction between these two variables among senior high school learners in Indonesia, in an eagle-eyed view from which future researchers could conduct further relevant studies in the field.

1.3. Research objectives

There are two objectives of this study as follows.

1. To investigate the level of confidence of Indonesian senior high school learners in L2 speaking.
2. To investigate the influence of learners' L2 speaking confidence on their L2 WTC.

1.4. Research questions

There are two research questions in the present study as follows.

1. What is the level of confidence of Indonesian senior high school learners in L2 speaking?
2. Is there any influence of learners' L2 speaking confidence on their L2 WTC?

1.5. Significance of the study

The significance of the present study can be viewed from several angles. Theoretically, this study contributes to refining L2 WTC concerning L2 confidence at least in the Indonesian context. Pedagogically, the findings of this study may inform practitioners on the possible relationship between confidence and WTC that can be utilised to create a classroom atmosphere that is psychologically friendly for learners to use L2 in communication. For example, if L2 confidence is found to strongly predict L2 WTC, the finding can be a basis for teachers to create confidence-building activities in L2 classes, which may eventually lead to a higher level of L2 WTC.

2. Literature review

This section discusses previous studies pertinent to L2 speaking confidence and its possible relationship with L2 WTC. The section specifically highlights possible factors affecting L2 confidence and the potential interlink between L2 confidence and WTC in the Indonesian context.

2.1. L2 speaking confidence

Several factors are reported to affect L2 learners' speaking confidence negatively. A qualitative study by Fatmawati et al. (2020) in Indonesia reported several factors that negatively affect learners' speaking confidence. These included being laughed at by their friends, incomprehensible input, lack of preparation, and teachers' personalities. Earlier, several studies also reported that negative evaluations from peers or teachers became a spectre hindering learners from speaking confidently (Gan, 2012; Joe et al., 2017; Kitano, 2001; Subekti, 2018b). Learners felt less confident when their teachers demanded that they understand the materials and perform well quickly (Fatmawati et al., 2020). Several studies also suggested that learners became more anxious and afraid of talking if their teachers gave discouraging facial expressions (Peng, 2015; Subekti, 2018a) or if they perceived their teachers to be unfriendly (Effiong, 2016; Trang et al., 2013).

Furthermore, a qualitative study in Pakistan also reported the importance of teachers' role in familiarising learners with public speaking (Khan & Ali, 2010). In Turkey, a quantitative study involving high school learners also reported that learners' problems in L2 speaking were mainly attributed to insufficient language and content knowledge and limited exposure to the L2 outside classroom contexts (Tokoz-Goktepe, 2014). In line with that, a study in China suggested that English was relatively known as a subject rather than a language or a means of communication. The situation explained why L2 learners of English were reluctantly involved in English discussions in class (Peng, 2015). Generally, the use of L2, which is constrained in classroom contexts as in foreign language contexts, leads to limited opportunities for learners to train themselves outside class (Kirkpatrick, 2012), which may lead to a lack of confidence.

On a positive note, several other studies also reported several factors positively affecting learners' L2 confidence. A study by Alam et al. (2021) in Bangladesh reported that motivation was positively associated with L2 confidence. The study further reported that, apart from motivation as an intrinsic factor, social and environmental factors also play a part in affecting

learners' L2 confidence. This was in line with the results of previous studies, for example, a study in Iran by Doqaruni (2014), which found that collaborative speaking activities with peers made learners feel more confident.

In collaborative activities, self-comparison with peers may be lessened (Bao & Du, 2015), and learners may not feel burdened even if they are lagging behind their peers. Next, preparation before language performance seemed to be a key factor (Badrasawi et al., 2021; Ocak et al., 2010). A quantitative study in Malaysia by Badrasawi et al. (2021) reported that learners could speak English confidently, provided they were familiar with the topic. Likewise, an earlier study in Turkey reported that practising speaking in a quiet place could help learners minimise nervousness in pronouncing vocabulary, thus improving confidence (Ocak et al., 2010).

Similarly, L2 confidence could increase through frequent use of the language in the country where the language is spoken (Fidan & Karatepe, 2021), for example, through study abroad programmes. Though not specifically investigating L2 confidence, Glory and Subekti (2022) found that Indonesian learners' desire to pursue further studies abroad compelled them to be confident and improve their English regardless of the hardship. Activities in pairs, such as interview activities in speaking classes, were also reported to allow learners to communicate in L2 continuously, thus increasing their confidence step-by-step (Hasriani, 2019; Nazara, 2011; Rahayu, 2010).

A recent study in Indonesia by Hendrian and Kurniawati (2024) also suggests that when learners perceived themselves to have good relationships with their teachers, they tended to engage themselves in classroom activities more. The findings may indicate that when learners feel 'safe' in class, they tend to be more courageous in L2 learning. In summary, an array of possible factors has been reported to contribute to learners' L2 confidence, ranging from those within learners themselves and those of external origins.

2.2. Interaction between L2 speaking confidence and willingness to communicate

Studies in several contexts contemplated the interactions between L2 confidence and L2 WTC (Aoyama, 2020; Lee & Drajati, 2019; Peng & Woodrow, 2010). A quantitative study involving 579 Chinese university learners reported that learners' communication confidence, which is the combination of perceived competence and a lack of anxiety, strongly predicted L2 WTC (Peng & Woodrow, 2010). Communication confidence accounted for 54% of the total variance in L2 WTC. In line with that, correlation studies involving Indonesian university learners of English (Lee & Drajati, 2019) and Japanese learners of English (Aoyama, 2020) found that L2 confidence and L2 WTC were significantly correlated with moderate strengths. These studies uniformly suggested positive relationships between L2 speaking confidence and L2 WTC.

Specific to the Indonesian context, there have been several studies focusing on L2 confidence in various education levels and contexts (Aritonang, 2014; Dewi & Subekti, 2024b; Hadi et al., 2021; Lee & Drajati, 2019; Liandika, 2021; Muin & Aswati, 2019; Roysmanto, 2018; Sari, 2018; Suseno & Rasul, 2022; Tridinanti, 2018). Aritonang (2014), for example, investigated Indonesian non-English language teachers' confidence in using English as a medium of instruction. The study found that teachers' confidence increased to varying degrees, and there was a transformation from the extrinsic motivation of using L2 to intrinsic motivation. Other studies contemplated the confidence of Indonesian L2 learners at the university level (Dewi & Subekti, 2024b; Lee & Drajati, 2019; Roysmanto, 2018; Tridinanti, 2018), senior high school level (Liandika, 2021; Suseno & Rasul, 2022), junior high school level (Hadi et al., 2021; Muin & Aswati, 2019) and private courses (Sari, 2018). In the university context, for example,

Tridinanti (2018) conducted a small-scale quantitative study and revealed that L2 confidence was positively associated with L2 achievement of English department students. Next, in the senior high school context, an action research study by Suseno and Rasul (2022) revealed that as students became more confident in their ability through teachers' guidance in their first language (L1), they became more willing to participate in class. This finding conformed to the findings of previous relevant studies (Arung et al., 2019; Nety et al., 2020). A qualitative study by Nety et al. (2020), for instance, also reported that participants who had self-confidence tended to be braver and were not afraid of making mistakes in L2 classes. All in all, though perhaps not straightforwardly, several studies in Indonesia have suggested a potential connection between L2 confidence and L2 WTC.

3. Methodology

This section outlines the research design, participants, and instruments as well as the data collection procedure, data analysis, and ethical principles practised throughout the research process.

3.1. Research design

This study employed an online survey in the form of a Google Forms questionnaire as the method of collecting data. Quantitative methods such as surveys have been very popular in L2 confidence and WTC. It can be seen from many more studies conducted using such a design (Aoyama, 2020; Badrasawi et al., 2021; Liandika, 2021; Roysmanto, 2018; Shelton-strong & Mynard, 2020; Subekti, 2019b) than those conducted in qualitative designs (Hasriani, 2019; Subekti, 2019a). Studies contemplating the possible interaction between high school learners' L2 confidence and L2 WTC may be rare, if not non-existent, in the Indonesian context. So far, researchers in this context have conducted studies involving either speaking L2 confidence or L2 WTC and other variables (Dewi & Subekti, 2024a, 2024b; Liandika, 2021; Nazara, 2011; Paradewari, 2017; Roysmanto, 2018). For this reason, a quantitative study involving a representative sample may provide data with the possibility of generalisation (Gray, 2022) on the interaction between Indonesian high school learners' L2 confidence and L2 WTC.

3.2. Participants

159 Indonesian senior high school learners participated in this study regardless of their grades, levels, or institutions. Of these 159 participants, 37 participants (23.3%) were from Java, 17 (10.7%) were from Sumatera, 70 (44.4%) were from Kalimantan, 25 (15.7%) were from Sulawesi, 2 (1.3%) were from Bali, 1 (0.6%) from Nusa Tenggara, and 7 (4.4%) from other islands or regions in Indonesia. Senior high school learners were targeted in this study because, thus far, studies on L2 confidence (Khan & Ali, 2010; Kumar et al., 2021; Tokoz-Goktepe, 2014) and L2 WTC (Aoyama, 2020; Manipuspika, 2018; Peng & Woodrow, 2010; Subekti, 2019b) predominantly involved learners at the university level. Hence, a quantitative study involving senior high school learners was arguably more urgent in providing an eagle-eyed view regarding the relatively under-researched education context.

3.3. Instruments

The present study employed questionnaires on L2 speaking confidence and L2 WTC adapted from several previous works. Eleven Likert-scale items were used to measure L2 confidence, adapted from the work of Griffiee (1997). An example of the statement is "I can talk to a group of people in English". Furthermore, there were a total of fifteen Likert-scale items on L2 WTC.

Nine items were adapted from a study in China (Peng & Woodrow, 2010), whilst the other six items were from a study in Japan (Matsuoka et al., 2014). An example of the items is “I am willing to speak English without preparation in class”. Four possible responses were available: “Strongly agree”, “Agree”, “Neither agree nor disagree”, “Disagree”, and “Strongly disagree”. These questionnaire items were translated into Indonesian to ensure that the targeted senior high school participants could better understand the contents and could give more accurate responses. Back translation to English was conducted to ensure that the translation was correct. The questionnaire items were piloted to ensure that the questionnaires were unambiguous, precise, and simple to complete (Gray, 2022). Furthermore, for a clearer presentation of findings and more thorough analyses, the questionnaire items on L2 confidence were divided into three categories: “Perceived ability to communicate in English”, “Enthusiasm to use English in communication”, and “Positive feeling when communicating in English.”

3.4. Data collection procedures

The Google Forms questionnaire link was shared and distributed via social media platforms such as Instagram, WhatsApp, and Twitter from 24 September 2021 to 4 February 2022. Out of 161 learners filling out the questionnaires, only the data from 159 learners were further analysed as two participants did not provide complete data and were thus disregarded.

3.5. Data analysis

The data from the 159 participants were recorded in SPSS 25 for further analysis. In this stage, the responses to the Likert-scale items were recorded as follows. “Strongly agree” was recorded as five points, “Agree” as four points, “Neither agree nor disagree” as three points, “Disagree” as two points, and “Strongly disagree” as one point. The authors employed descriptive statistics to answer the first research question on learners’ level of L2 speaking confidence. The data were presented as mean scores, standard deviations, and percentages. To answer the second research question on the influence of L2 speaking confidence on L2 WTC, a bivariate regression analysis was performed with L2 speaking confidence as the independent variable and L2 WTC as the dependent variable. The sequence of data collection and analysis can be seen in Figure 1.

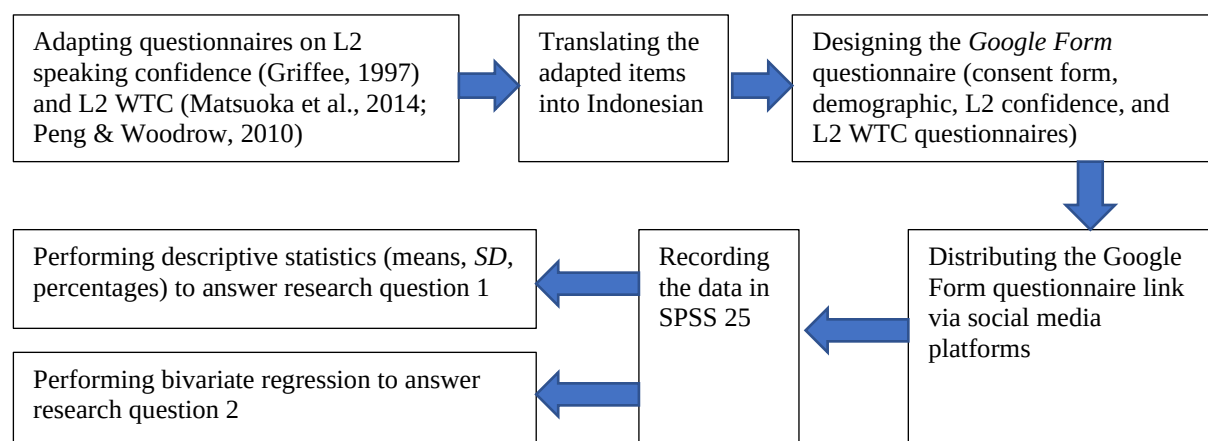


Figure 1. The sequence of data collection and analysis

3.6. Ethical consideration

This study employed the principles of autonomy and beneficence. To ensure the participation was voluntary, the authors provided an informed consent form at the beginning before the prospective participants filled in the main questionnaire items. The consent form provided information such as the study's objectives, the researchers' identities, and their rights and responsibilities if they decided to participate (Israel & Hay, 2006). If the prospective participants indicated their agreement to participate, they were directed to fill out the questionnaires, and if they did not, they could stop immediately. Second, the participants only needed approximately ten minutes to complete the questionnaires, and they were given monetary appreciation, suggesting the implementation of the beneficence principle of maximising benefits for the participants.

4. Findings

The eleven questionnaire items on L2 speaking confidence produced a 0.66 McDonald's omega coefficient and a 0.65 Cronbach's alpha coefficient, suggesting that these items were reliable. The fifteen items on L2 WTC produced 0.70 MacDonal's omega and Cronbach's alpha coefficients, suggesting the items on L2 WTC were also reliable.

4.1. Indonesian senior high school learners' L2 speaking confidence

From eleven statements on L2 speaking confidence, the maximum composite score was 52, and the minimum was 20, with ($M = 38.55$, $SD = 6.60$). The average mean score ($M = 3.50$) on a scale of 1 to 5. This indicated that the participants' speaking confidence was generally at a moderate level.

4.1.1. Perceived ability to communicate in English

Table 1 shows the participants' responses to the "perceived ability to communicate in English" category, which comprises items 1, 4, 6, 8, and 10.

Table 1. Confidence in the use of English in communication

Item No	Statements	Strongly Agree	Agree	Neither Agree nor Disagree	Disagree	Strongly Disagree	Mean Score	SD
1	I can be interviewed in English.	29.6%	52.8%	0%	15.7%	1.9%	3.92	1.05
4	I can do discussions in English.	17.0%	52.2%	0%	22.0%	8.8%	3.47	1.25
6	I can speak English easily.	17.0%	40.9%	0%	31.4%	10.7%	3.22	1.34

Item No	Statements	Strongly Agree	Agree	Neither Agree nor Disagree	Disagree	Strongly Disagree	Mean Score	SD
8	I can express my opinion in English while speaking with native speakers.	22.6%	40.3%	0%	27.7%	9.4%	3.39	1.35
10	I can talk to a group of people in English.	17.0%	42.8%	0%	30.2%	10.0%	3.26	1.32

From Table 1, it can be seen that apart from item 1 on the confidence of being interviewed in English, producing a fairly high mean score ($M = 3.92$), the other items produced lower mean scores ($M = 3.26$ to 3.47), suggesting lower moderate L2 speaking confidence.

4.1.2. Confidence in the use of English in communication

Table 2 shows the participants' responses to the "confidence to use English in communication" category, comprising items 2, 7, and 9.

Table 2. Confidence in the use of English in communication

No	Statements	Strongly Agree	Agree	Neither Agree nor Disagree	Disagree	Strongly Disagree	Mean Score	SD
2	I could study in a country where English is the official language.	35.9%	45.9%	0%	15.1%	3.1%	3.96	1.12
7	I say something to other people in English every day.	17.0%	42.1%	0%	30.2%	10.7%	3.25	1.33
9	I am looking for an opportunity	13.8%	54.7%	0%	22.1%	9.4%	3.42	1.24

No	Statements	Strongly Agree	Agree	Neither Agree nor Disagree	Disagree	Strongly Disagree	Mean Score	SD
	to speak English.							

Table 2 shows that only item 2 on the desire to study in a country where English is used as the official language produced a high mean score, at 3.96. Both item 7 on the frequency of learners speaking in English and item 9 on looking for an opportunity to communicate in English only produced low-moderate mean scores of 3.25 and 3.42, respectively.

4.1.3. Positive feelings when communicating in English

Table 3 shows the participants' responses to the "positive feelings when communicating in English" category, comprising items 3, 5, and 11.

Table 3. Positive feelings when communicating in English

No	Statements	Strongly Agree	Agree	Neither Agree nor Disagree	Disagree	Strongly Disagree	Mean Score	SD
3	I like to speak English.	22.0%	42.1%	0%	25.2%	10.7%	3.40	1.36
5	When I speak English, I feel cheerful.	23.9%	46.0%	0%	22.6%	7.5%	3.56	1.28
11	I am relaxed when speaking English.	32.1%	40.9%	0%	20.1%	6.9%	3.71	1.29

From Table 3, it can be seen that all three items produced relatively the same mean scores ($M = 3.40$ to 3.71), with no mean score in stark contrast to the others. This indicated concerning feelings when using English; the participants reported relatively the same moderate responses, perhaps suggesting moderately positive feelings when using English.

4.2. The influence of learners' L2 speaking confidence towards their willingness to communicate

The composite scores of both variables were obtained to find the influence of learners' L2 speaking confidence on their L2 WTC. From this procedure, this study found a moderate level of L2 WTC with an overall mean score ($M = 54.61$; $SD = 8.08$) and an average mean score (M

= 3.64) on a scale of 1 to 5. This finding was not further elaborated as this was not the present study's focus.

Using the composite scores of L2 speaking confidence and those of L2 WTC, this study employed bivariate regression analysis to find the influence of learners' L2 speaking confidence on their L2 WTC. The results can be observed in Table 4.

Table 4. Regression Results with Speaking Confidence as the Independent Variable

Regression weights	R^2	β	t	F	p
L2 Speaking confidence → L2 WTC	0.30	28.69	8.99	67.85	0.000

From Table 4, the main findings can be highlighted. Learners' L2 speaking confidence significantly influenced their L2 WTC positively, $\beta=28.69$, $F(1, 157) = 67.85$, $p < 0.001$. The higher learners' L2 speaking confidence, the higher their L2 WTC. L2 speaking confidence could explain 30% of the total variance in L2 WTC.

5. Discussion

The present study had two research objectives. These are to investigate the participants' level of L2 speaking confidence and to see whether their L2 confidence could predict their L2 WTC. In the following sections, these two objectives are discussed one by one.

5.1. Indonesian senior high school learners' L2 speaking confidence

Regarding the participants' L2 speaking confidence, the results are divided into categories to ensure thorough analyses. The analyses for each category can be observed in the following parts.

5.1.1 Perceived ability to communicate in English

In this category, the study found that learners expressed higher confidence in using English when being interviewed. Though still at moderate levels, they were less confident concerning their ability to have discussions, express opinions, and talk to a group of people in English. Learners' higher level of confidence when being interviewed in English could be attributed to the fewer initiatives on the part of the interviewees in an interview situation. When being interviewed, learners did not need to initiate conversation and were merely required to respond to the interviewers' questions. In comparison, in discussion contexts, learners needed to be ready to take turns and initiate conversations per the dynamics of the discussions, very often in impromptu situations. Hence, this may require a higher mastery of the language, thus the lower mean scores of the responses to the statements regarding these relevant situations.

On a positive note, these findings suggest that interviews can be used as a strategic class activity. A study involving learners from an English Language Education in Indonesia by Nazara (2010) reported that activities allowing pair direct communication could facilitate learners to show their L2 mastery more optimally. Specific to doing interviews as a learning activity, in another English Education context in Indonesia, Hasriani (2019) found that

interview techniques used in the Speaking class could improve learners' speaking skills. They could also socialise due to the interactions, eventually increasing confidence. An earlier study in an Indonesian high school context reported that the interview technique could improve learners' fluency as it created a condition requiring learners to speak continuously (Rahayu, 2010).

The relatively lower mean scores on items concerning interactive communication necessitating impromptu L2 production in front of a group of people may be attributed to several factors. Interaction may be the most difficult skill to teach because interactional activities are so complex and delicate that they cannot be controlled (Richards, 2006). A quantitative study involving 120 Junior High School learners in Turkey by Tokoz-Goktepe (2014) reported that most participants feared conversations in English because limited vocabulary mastery made them unable to express ideas in their minds, and thus, they gave up speaking. Another possible factor is their perceived communication competence. At times, not learners' competence but their perceived competence affects their language performance (Bandura, 1997). Learners' perceived competence being more determinant than their actual competence may especially be the case in Asian contexts, including Indonesia, where learners tend to care about how others think of them, including as L2 speakers (Joe et al., 2017; Subekti, 2018b).

5.1.2. Confidence in the use of English in communication

The findings in this category suggested that despite learners' relatively high confidence in being able to study abroad in countries using English as the official language one day, they reported low-moderate confidence regarding the frequency of using English and their effort to find the opportunity to use the language. The finding on confidence in the study abroad prospect aligned with a finding of mixed-method research by Fidan and Karatepe (2021) involving 100 learners in Turkey. The study reported that the participants had positive thoughts about studying abroad to improve their English mastery. Though not specifically investigating L2 speaking confidence, a qualitative study by Glory and Subekti (2022) found that the desire to study abroad in the future was associated with a lower fear of negative evaluation, promoting more confidence in L2.

Furthermore, learners reported low-moderate L2 confidence in a way that some of them did not use English frequently and did not try to find an opportunity to do so. This result could be attributed to the position of English as a foreign language in Indonesia. Hence, outside classroom contexts, learners are unlikely to find sufficient opportunities to use English in daily communications (Kirkpatrick, 2012). A study in Indonesia by Fatmawati et al. (2020) investigating speaking confidence also reported that one of the factors attributed to learners' lack of confidence was the limited opportunity to use English outside classroom contexts. To compensate for this condition, teachers should use classroom activities more optimally to facilitate learners' more frequent and extensive use of English. A quantitative study involving 300 learners in Malaysia by Badrasawi et al. (2021) found that learners did not feel confident when asked to communicate on unfamiliar topics, talk to strangers, or when they did not have enough time to prepare. Informed by the findings of the present study and those of Badrasawi et al. (2021), teachers, for example, can promote more small group activities rather than whole-class discussions led by the teachers, can give learners the freedom to choose their group mates, and only ask for impromptu language production in a psychologically safe environment, such as small groups whose members learners are already familiar with.

5.1.3. Positive feelings when communicating in English

In this category, the participants reported relatively the same moderate responses, and this result probably indicates the participants' moderately positive feelings when using English.

That being said, seen from the responses on all three items in more detail, it was found that 57 participants (35.9%) did not like to speak English, 48 participants (30.1%) did not feel cheerful when speaking in English, and 43 participants (27%) did not feel relaxed when speaking in English. This could be attributed to speaking anxiety. In an old yet still relevant canon, it is posited that oral classroom activities are the most problematic as well as anxiety-provoking (Steinberg & Horwitz, 1986), and this negative feeling could be attributed to several possible factors within learners, such as low proficiency (Subekti, 2018a), and beyond such as teachers and instructional practices (Manipuspika, 2018; Peng, 2015; Subekti, 2018a). Among others, the external factors instilling speaking anxiety could include teachers' discouraging facial expressions (Peng, 2015; Subekti, 2018a), perceived unfriendliness of teachers (Effiong, 2016; Trang et al., 2013), and some classroom activities such as speaking in front of the whole class and doing an impromptu L2 production.

5.2. The influence of learners' L2 speaking confidence on their willingness to communicate

The data generally indicates that learners' L2 speaking confidence significantly influenced their L2 WTC positively. This finding could align with several previous studies' findings (Aoyama, 2020; Lee & Drajati, 2019; Peng & Woodrow, 2010). The study by Lee and Drajati (2019) involving 183 L2 learners at the university level in Indonesia reported a significantly moderate association between confidence and L2 WTC. Similarly, the study by Aoyama (2020) involving 88 Japanese L2 learners in California reported that learners' L2 confidence moderately correlated with their L2 WTC. A large-scale quantitative study involving 579 Chinese learners of English at the university level also noted that communication confidence, a combination of lack of anxiety and perceived competence, could predict 54% of the total variance of their L2 WTC (Peng & Woodrow, 2010). The relatively uniform findings between the present study involving senior high school learners and those of the previous studies involving university learners in various contexts suggest that the positive influence of L2 confidence on L2 WTC has thus far been undisputed even across education levels.

As L2 WTC is seen as the most immediate factor in the use of L2 (Clément et al., 2003), improving learners' L2 confidence could indirectly facilitate more extensive use of L2 by learners. A study involving 65 Indonesian L2 learners by Liandika (2021) suggested that most of the learners with high confidence bravely spoke English even though they were not good at their pronunciation, whilst other learners having low confidence tended to be silent, ignored the subject, and did not dare to answer teachers' questions. L2 confidence could be what mattered to a certain extent. Teachers need to provide an environment that nurtures these learners' confidence whilst reducing their negative emotions, such as anxiety, through daily informed instructional practices.

6. Conclusion and recommendation

The present study contributes to understanding Indonesian senior high school learners' level of L2 speaking confidence and the interaction between the confidence and their L2 WTC. Considering that the participants of this study were from various areas in Indonesia, the findings may be generalised to contexts whose participants share approximately similar

characteristics with those of this study. Hence, this study could provide an eagle-eyed understanding of the rather under-researched participants' L2 speaking confidence and L2 WTC. The findings of this study could be compared to future studies involving participants from the same education level, regardless of context.

Pedagogical implications can be outlined. For example, teachers can design activities that provide conducive environments for learners to be confident in using L2 regardless of their competence. This can be achieved, among others, by minimising or omitting, where possible, evaluative situations where learners are directly judged in a right-or-wrong fashion, such as multiple-choice fill-in-the-blank assessments. Teachers can minimise teacher-talk time and promote more interactive activities conducted in small groups, allowing individual learners to utilise the precious class session to use English optimally. This may not have been possible if the class relied too much on whole-class activities.

6.1. Limitations and future studies

This study may have several limitations. The findings on learners' confidence in studying abroad in the future should be considered with caution. On our reflection after the data collection phase, this could be more of responses reflecting their hope and optimism rather than their actual L2 confidence, considering that the participants' responses produced a particularly high mean score and the highest mean score across all the questionnaire items. Furthermore, seen from the relatively high standard deviations across all questionnaire items ranging from 1.05 up to 1.36, the participants' responses were quite dispersed. This indicated that differences among participants' responses could be quite extreme, perhaps attributed to the various geographical areas they were from, which could have indirectly affected the quality of L2 instruction, the frequency of L2 use, and other relevant aspects.

Furthermore, relevant future studies can be suggested as follows. Contemplating senior high school learners' L2 speaking confidence or L2 WTC concerning instructional practices in a mixed-method design can be worthwhile. Such studies may investigate how certain instructional practices negatively or positively affect confidence and WTC. Involving teachers and learners in these studies can also be strategic to see if their views conform to each other or if any mismatch may hinder learners' learning. Furthermore, considering that Indonesian senior high school learners were still fairly under-involved in this field, it may be worthwhile to compare the L2 speaking confidence and L2 WTC among such learners from several geographical areas in Indonesia.

Acknowledgments

The authors would like to express their deepest gratitude to the present study's participants, without whom this study may not have been possible, and their thankfulness also goes to the anonymous reviewers for their feedback for improvement.

Conflict of interest

No potential conflict of interest was reported by the authors.

Funding

The authors received no financial support for the study, authorship, and/or publication of this article.

Declaration of AI usage

The authors used Grammarly to polish the language in some parts of the article. However, they declared that the content of the article is totally theirs.

References

- Alam, M. R., Jahan, S., Khan Milon, M. R., Ansarey, D., & Faruque Al Hadi, S. U. (2021). Accelerating learners' self-confidence level in second language acquisition: A qualitative study. *ICRRD Quality Index Research Journal*, 2(3), 141–153. <https://doi.org/10.53272/icrrd.v2i3.5>
- Amiryousefi, M. (2018). Willingness to communicate, interest, motives to communicate with the instructor, and L2 speaking: A focus on the role of age and gender. *Innovation in Language Learning and Teaching*, 12(3), 221–234. <https://doi.org/10.1080/17501229.2016.1170838>
- Aoyama, T. (2020). International students' willingness to communicate in English as a second language: The effects of L2 self-confidence, acculturation, and motivational types. *Journal of International Students*, 10(3), 703–723. <https://doi.org/10.32674/jis.v10i3.730>
- Aritonang, M. (2014). Motivation and confidence of Indonesian teachers to use English as a medium of instruction. *TEFLIN Journal*, 25(2), 147–167. <https://doi.org/10.15639/teflinjournal.v25i2/147-167>
- Arung, F., Rafli, Z., & Dewanti, R. (2019). I do like speaking English: A multiple case study. *Getsempena English Education Journal (GEEJ)*, 6(2), 230–247. <https://doi.org/10.46244/geej.v6i2.880>
- Badrasawi, K. J. I., Kassim, N. L. A., Zubairi, A. M., Johar, E. M., & Sidik, S. S. (2021). English language speaking anxiety, self-confidence, and perceived ability among science and technology undergraduate students: A Rasch analysis. *Pertanika Journal of Social Sciences and Humanities*, 29(3), 309–334. <https://doi.org/https://doi.org/10.47836/pjssh.29.S3.16>
- Bandura, A. (1997). *Self-efficacy: The exercise of control*. Macmillan. <https://connect.springerpub.com/content/sgrjcp/13/2/158>
- Bao, R., & Du, X. (2015). Implementation of task-based language teaching in Chinese as a foreign language: Benefits and challenges. *Language, Culture and Curriculum*, 28(3), 291–310. <https://doi.org/10.1080/07908318.2015.1058392>
- Clément, R., Baker, S. C., & MacIntyre, P. D. (2003). Willingness to communicate in a second language: The effects of context, norms, and vitality. *Journal of Language and Social Psychology*, 22(2), 190–209. <https://doi.org/10.1177/0261927X03022002003>
- Dewi, L. P., & Subekti, A. S. (2024a). Indonesian learners' L2 reticence in English for specific purposes classes and its influence on L2 confidence. *Argentinian Journal of Applied Linguistics*, 12(2), 3–15. <https://ajal.faapi.org.ar/ojs-3.3.0-5/index.php/AJAL/article/view/353/233>
- Dewi, L. P., & Subekti, A. S. (2024b). L2 self-confidence: An examination of Indonesian university students in various English for Specific Purposes classes. *International Journal of Humanity Studies*, 8(1), 26–37. <https://doi.org/10.24071/ijhs.v8i1.8706>
- Doqaruni, V. R. (2014). A quantitative action research on promoting confidence in a foreign language classroom: Implications for second language teachers. *Inquiry in Education*, 5(1), 1–20. <http://digitalcommons.nl.edu/ie/vol5/iss1/3>
- Effiong, O. (2016). Getting them speaking: Classroom social factors and foreign language anxiety. *TESOL Journal*, 7(1), 132–161. <https://doi.org/10.1002/tesj.194>

- Evans, S., & Green, C. (2007). Why EAP is necessary: A survey of Hong Kong tertiary students. *Journal of English for Academic Purposes*, 6(1), 3–17. <https://doi.org/10.1016/j.jeap.2006.11.005>
- Fatmawati, M., Haura, R., & Supiani. (2020). Factors affecting EFL learners' confidence in speaking English at the MEC English course in Banjarmasin. *Proceedings of SHEPO 2020 (International Conference on Social Sciences & Humanities, Economics, and Politics)*, 102–108. <http://dx.doi.org/10.31602/piuk.v1i1.3985>
- Fidan, N., & Karatepe, C. (2021). How do Erasmus students evaluate their language experience abroad? *Eurasian Journal of Educational Research*, 93, 51–72. <https://doi.org/10.14689/ejer.2021.93.3>
- Gan, Z. (2012). Understanding L2 speaking problems: Implications for ESL curriculum development in a teacher training institution in Hong Kong. *Australian Journal of Teacher Education*, 37(1), 43–59. <http://ro.ecu.edu.au/ajte/vol37/iss1/3>
- Glory, K. M., & Subekti, A. S. (2022). Fear of negative evaluation factors from ought-to L2 self among Indonesian high school EFL learners. *Pedagogy: Journal of English Language Teaching*, 10(1), 25–37. <https://doi.org/10.32332/joelt.v10i1.4536>
- Gray, D. E. (2022). *Doing research in the real world* (5th ed.). Sage Publications. <https://www.torrossa.com/it/resources/an/5282199>
- Griffie, D. T. (1997). Validating a questionnaire on confidence in speaking English as a foreign language. *JALT Journal*, 19(2), 177–197. https://jalt-publications.org/files/pdf/jalt_journal/jj-19.2.pdf#page=10
- Hadi, M. S., Mutiarani, M., & Hamid, A. R. (2021). The factor of self-confidence affecting Indonesian young learners' English speaking proficiency level. *English Teaching Journal: A Journal of English Literature, Language and Education*, 9(1), 19–25. <https://doi.org/10.25273/etj.v9i1.8884>
- Hasriani, G. (2019). Interview as a learning technique in speaking subject: Students' perspective. *Language Circle: Journal of Language and Literature*, 13(2), 132–139. <https://doi.org/10.15294/lc.v13i2.18976>
- Hendrian, N., & Kurniawati, L. A. (2024). A correlational study on teacher-student relationships and students' engagement in EFL classes. *Cambodian Journal of Educational and Social Sciences (CJESS)*, 1(2), 53–74. <https://doi.org/10.69496/cjess.v1i2.31>
- Israel, M., & Hay, I. (2006). *Research ethics for social scientists*. SAGE Publications. <https://cir.nii.ac.jp/crid/1130282269717418752>
- Joe, H. K., Hiver, P., & Al-Hoorie, A. H. (2017). Classroom social climate, self-determined motivation, willingness to communicate, and achievement: A study of structural relationships in instructed second language settings. *Learning and Individual Differences*, 53, 133–144. <https://doi.org/10.1016/j.lindif.2016.11.005>
- Khan, N., & Ali, A. (2010). Improving the speaking ability in English: The students' perspective. *Procedia Social and Behavioral Sciences*, 2(2), 3575–3579. <https://doi.org/10.1016/j.sbspro.2010.03.554>
- Kirkpatrick, A. (2012). English as an international language in Asia: Implications for language education. In A. Kirkpatrick & R. Sussex (Eds.), *English as an international language in Asia: Implications for language education* (pp. 29–44). Springer. https://doi.org/10.1007/978-94-007-4578-0_3
- Kitano, K. (2001). Anxiety in the college Japanese language classroom. *The Modern Language Journal*, 85(4), 549–566. <https://doi.org/10.1111/0026-7902.00125>
- Kumar, T., Qasim, A., Mansur, S. B., & Shah, A. H. (2021). Improving EFL students' speaking proficiency and self-confidence using drama technique: An action research.

- Cypriot Journal of Educational*, 17(2), 372–383.
<https://doi.org/10.18844/cjes.v17i2.6813>
- Lee, J. S., & Drajiati, N. A. (2019). Affective variables and informal digital learning of English: Keys to willingness to communicate in a second language. *Australasian Journal of Educational Technology*, 35(5), 168–182.
<https://doi.org/10.14742/ajet.5177>
- Liandika, A. (2021). *The correlations between students' learning attitude and their speaking confidence at SMK Negeri 1 Kota Jambi* [Master's thesis, Islamic State University Sulthan Thaha Saifuddin Jambi]. UIN Repository.
- MacIntyre, P. D., Clement, R., Dornyei, Z., & Noels, K. A. (1998). Conceptualizing willingness to communicate in a L2: A situational model of L2 confidence and affiliation. *The Modern Language Journal*, 82(4), 545–562.
<https://doi.org/10.1111/j.1540-4781.1998.tb05543.x>
- Manipuspika, Y. S. (2018). Correlation between anxiety and willingness to communicate. *Arab World English Journal (AWEJ)*, 9(2), 200–217.
<https://doi.org/10.24093/awej/vol9no2.14>
- Matsuoka, R., Matsumoto, K., Poole, G., & Matsuoka, M. (2014). Japanese university students' willingness to communicate in English: The serendipitous effect of oral presentations. *Pan-Pacific Association of Applied Linguistics*, 18(1), 193–218.
<http://files.eric.ed.gov/fulltext/EJ1047466.pdf>
- Muin, A., & Aswati, A. (2019). Effects of socio-affective strategies on students' self-confidence in classroom speaking activities. *Loquen: English Studies Journal*, 12(2), 91–98. <https://doi.org/10.32678/loquen.v12i2.2178>
- Nazara, S. (2011). Students' perception of EFL speaking skills development. *JET (Journal of English Teaching)*, 1(1), 28–43. <https://doi.org/10.33541/jet.v1i1.50>
- Nety, N., Wahyuni B, A., & Nurhaeni, N. (2020). Students' self-confidence in speaking English. *English Education Journal*, 6(1), 8–16. <https://doi.org/10.55340/e2j.v6i1.284>
- Ocak, G., Kuru, N., & Özçalışan, H. (2010). As a classroom language, students' attitudes towards speaking Turkish in English prep classes. *Procedia - Social and Behavioral Sciences*, 2(2), 661–665. <https://doi.org/10.1016/j.sbspro.2010.03.080>
- Paradewari, D. S. (2017). Investigating students' self-efficacy in public speaking. *International Journal of Education and Research*, 5(10), 97–108.
<https://www.ijern.com/journal/2017/October-2017/09.pdf>
- Peng, J. E., & Woodrow, L. (2010). Willingness to communicate in English: A model in the Chinese EFL classroom context. *Language learning*, 60(4), 834–876.
<https://doi.org/10.1111/j.1467-9922.2010.00576.x>
- Peng, Y. (2015). On the importance of positive emotions in college English teaching and learning. *Proceedings of the 2015 International Conference on Education Reform and Modern Management*, 124–127. Atlantis Press. <https://doi.org/10.2991/ermm-15.2015.32>
- Rahayu, K. (2010). *Improving speaking skills by using interviews* [Undergraduate thesis, Universitas Sebelas Maret]. Universitas Sebelas Maret Digital Library.
<https://digilib.uns.ac.id/dokumen/download/22540/NDc2MTQ=/Improving-speaking-skill-by-using-interview-abstrak.pdf>
- Richards, J. C. (2006). Developing classroom speaking activities: From theory to practice. *Guidelines: Singapore Periodical for Classroom Language Teachers*, 28(2), 1-10.
<file:///C:/Users/DeLL/Downloads/developing-classroom-speaking-activities.pdf>
- Roysmanto, R. (2018). A correlation between self-confidence and the students' speaking skills. *Research and Innovation in Language Learning*, 1(1), 1–8.
<https://doi.org/10.33603/rill.v1i1.1076>

- Sari, P. (2018). Using vlog in the YouTube channel as a means to improve students' motivation and confidence to speak English in Intermediate 1 Level of LB-LIA Jambi. *International Journal of Language Teaching and Education*, 1(1), 38–44.
<https://doi.org/10.22437/ijolte.v1i1.4596>
- Shelton-Strong, S. J., & Mynard, J. (2021). Promoting positive feelings and motivation for language learning: the role of a confidence-building diary. *Innovation in Language Learning and Teaching*, 15(5), 458–472.
<https://doi.org/10.1080/17501229.2020.1825445>
- Steinberg, F. S., & Horwitz, E. K. (1986). The effect of induced anxiety on the denotative and interpretive content of second language speech. *Tesol Quarterly*, 20(1), 131–136.
<https://doi.org/10.2307/3586395>
- Subekti, A. S. (2018a). An exploration of foreign language anxiety in the Indonesian university context: Learners' and teachers' voices. *TEFLIN Journal*, 29(2), 219–244.
<http://dx.doi.org/10.15639/teflinjournal.v29i2/219-244>
- Subekti, A. S. (2018b). Investigating the relationship between foreign language anxiety and oral performance of non-English major university students in Indonesia. *Dinamika Ilmu*, 18(1), 15–35. <https://doi.org/10.21093/di.v18i1.880>
- Subekti, A. S. (2019a). Situational willingness to communicate in English: Voices from Indonesian non-English major university students. *Indonesian Journal of English Language Teaching and Applied Linguistics (IJELTAL)*, 3(2), 373–390.
<https://doi.org/10.21093/ijeltal.v3i2.240>
- Subekti, A. S. (2019b). Willingness to communicate in English of non-English major university students in Indonesia. *Lingua Cultura*, 13(1), 55–66.
<https://doi.org/10.21512/lc.v13i1.5155>
- Suseno, I., & Rasul, T. (2022). Improving the students' speaking confidence by online learning. *Scope: Journal of English Language Teaching*, 7(1), 48–56.
<https://doi.org/10.30998/scope.v7i1.13609>
- Tokoz-Goktepe, F. (2014). Speaking problems of 9 th grade high school Turkish learners of L2 English and possible reasons for those problems: Exploring the teachers and students' perspectives. *Procedia - Social and Behavioral Sciences*, 116, 1875–1879.
<https://doi.org/10.1016/j.sbspro.2014.01.487>
- Trang, T. T. T., Baldauf, R. B., & Moni, K. (2013). Investigating the development of foreign language anxiety : an autobiographical approach. *Journal of Multilingual and Multicultural Development*, 34(7), 709–726.
<https://doi.org/10.1080/01434632.2013.796959>
- Tridinanti, G. (2018). The correlation between speaking anxiety, self-confidence, and speaking achievement of undergraduate EFL students of a private university in Palembang. *International Journal of Education and Literacy Studies*, 6(4), 35–39.
<https://doi.org/10.7575/aiac.ijels.v.6n.4p.35>
- Tsiplakides, I., & Keramida, A. (2009). Helping students overcome foreign language speaking anxiety in the English classroom: theoretical issues and practical recommendations. *International Education Studies*, 2(4), 39–44.
<https://eric.ed.gov/?id=EJ1065743>

Examining the relationship between instructional behaviors and critical thinking dispositions: A correlational study of general education

Daro Rous¹, Sereyrath Em²

¹ Kandal Regional Teacher Training Center (RTTC), Kandal, Cambodia

² Suranaree University of Technology (SUT), Nakhon Ratchasima, Thailand

Article info

Article history

Received: December 30, 2024

Revised: April 10, 2025

Accepted: April 24, 2025

Keywords

Behavior

Correlation

Critical openness,

Critical thinking dispositions

Reflective skepticism

Article type

Research article

Abstract

This study's objectives were to study the relationship between the critical thinking dispositions associated with instructional behaviors, examine the differences between grades in instructional behaviors and critical thinking dispositions, determine grade as a covariate variable while predicting instructional behaviors on critical thinking dispositions, and investigate the aspects of instructional behaviors predicting critical thinking dispositions. As can be known, critical thinking dispositions play an important role to contribute in critical reading. That means the more learners increase critical thinking, the more learners become critical readers. Hence, participants of 515 general knowledge students were from a general education school in Cambodia (8th graders = 143, 9th graders = 123, and 10th graders = 210), the age range was from 13 to 18 years old ($M = 1.57$, $SD = 0.50$). Some data is missing among grades that are less than 5%. Before using hierarchical multiple regression, one-way MANOVA was used to compare the differences between groups of grades. Findings revealed that both the 8th and 9th grades were different from the 10th grade. As well, grades were included through the regression model. However, grades were found to be non-significant in terms of interaction between instructional behaviors. Findings also proved that the aspects of instructional behaviors predicted two aspects of critical thinking dispositions, except that video lecture did not affect critical openness. This means the learner who suited a critical reader when teachers provided constructive feedback and support, self-determination in making decisions, sufficient video lessons, and cooperative learning. All in all, the implication of instructional behaviors might be suggested for furthermore general education.

This is an open-access article under the [CC BY-SA](#) license.



Corresponding Author

Dara Ruos

Kandal Regional Teacher Training Center (RTTC), Kandal, Cambodia

Email: rosdaro1234@gmail.com

1. Introduction

Reading helps learners build critical thinking skills, which are vital for their growth and understanding. Reading is essential for developing these talents. Nevertheless, a significant number of students, particularly those living in underdeveloped nations, have difficulty with reading competency, which in turn has an impact on their capacity for critical thinking. The

motivation of students can be supported by effective teaching actions, which can also boost the students' attitude toward critical thinking (Em & Khampirat, 2025). Thus, this study investigates the relationship between instructional behaviors and critical thinking across a variety of grade levels within the educational system.

1.1. Background information

Active reading practice is the highest factor that allows for the enhancement of critical thinking. Learners become human assets. Naturally, this has brought attention to reading difficulties regarding several aspects of human capital to enhance the scope of their knowledge (Maughan, 1995). The ability to read is very important for facilitating advanced learning and human resource development to realize a civilized society. In addition to increasing reading ability, it is concerned with some variables related to educational study. Critical reading encompasses critical thinking (Aghajani & Gholamrezapour, 2019). The expertise that critical readers can or cannot reach relies on the level of critical thinking as well (Wilson, 2016). Unfortunately, reading proficiency has been revealed to be a major concern. Based on the PISA-D report in 2017, most 15-year-old students in developing countries only attain the basic level of reading competency. Compared to OECD countries that participated in the assessment, approximately 23% of students in developing countries reach only the lowest level of reading, whereas the average for OECD countries is 80% (Ward, 2018). Furthermore, the PISA-2022 results revealed that students in developing countries still maintain a low average (OECD, 2023).

In this context, personal actions, among various circumstances, might be justified by understanding one's disposition (Facione, 2000). Instead, schema-theory-based reading comprehension has been associated with critical thinking skills, which are known to be a major predictor (Aloqaili, 2012; Norris & Phillips, 1987). Lower reading comprehension means fewer skills for critical thinking in students (Ghorbandordinejad & Heydari, 2012; Marzban & Barati, 2016). Nevertheless, some argue that critical thinking dispositions have been measured as originally observed constructs to be enhanced with these dimensions and thus appraised through skills of thinking critically (Álvarez-Huerta et al., 2022; Cheng & Wan, 2017; Facione et al., 1995a; Kamgar & Jadidi, 2016; Norris, 2003). Hence, the thought process should reflect the tendencies of a critical thinker.

Consequently, grounded in self-determination theory, when learners are supported through effective instructional behaviors, they might improve their learning motivation (see Ruos et al., 2025). Simultaneously, this might enhance critical thinking dispositions when learners feel supported in a self-determination context (Xu & Yang, 2024). Hence, this study suggests effective instructional behaviors to address the research problem indirectly.

1.2. Research gaps

Many studies have revealed that instructional behaviors (i.e., support and feedback, cooperative support, autonomy support, video lectures) might enhance critical thinking dispositions effectively (e.g., Arslan & Demirtaş, 2016; Heng, 2014; Janse Van Rensburg & Rauscher, 2022; Pakmehr et al., 2015; Sablić et al., 2021; Xu & Yang, 2024). However, Zhang and Chen (2021) found an insufficient effect on critical thinking in nursing education. Basu Roy and McMahon (2012) also revealed that using video lectures linked with their training might decrease their level of critical thinking. Hence, different contexts might lead to different results. Moreover, all constructs were revised from different studies. Therefore, a simultaneous study might represent the gap in this research.

Importantly, the disappearance of critical thinking dispositions has been a rationale for decreasing reading literacy (Aghajani & Gholamrezapour, 2019; Aloqaili, 2012; Ghorbandordinejad & Heydari, 2012; Maughan, 1995; Wilson, 2016). Consequently, this study might enhance the level of reading comprehension among adult learners. Interestingly, counterparts, teachers, and policymakers might consider including this study in their curriculum and instruction. Theoretically, self-determination theory might demonstrate its potential in different contexts, especially in developing countries.

1.3. Research objective

The objectives of this study are as follows.

1. To study the relationship between aspects of instructional behaviors and critical thinking disposition.
2. To examine the differences between grades in instructional behaviors and critical thinking dispositions.
3. To determine grade as a covariate variable while predicting instructional behaviors on critical thinking dispositions.
4. To investigate the aspects of instructional behaviors predicting critical thinking dispositions.

1.4. Research questions

To address the research problems, this study applied these questions as follows.

1. What is the relationship between measures of instructional behavior and critical thinking dispositions?
2. Are there differences between grades, instructional behaviors, and critical thinking dispositions?
3. Is grade a covariate variable while predicting instructional behaviors on critical thinking dispositions?
4. Which aspects of instructional behaviors might predict critical thinking dispositions?

2. Literature review

This section presents an overview of the theoretical and empirical foundations related to the two main variables examined in this study: instructional practices and critical thinking dispositions. Instructional behaviors have a crucial role in creating learning settings that foster critical thinking dispositions, needed for students' cognitive development and decision-making abilities. Critical thinking tendencies are vital for kids. This review aims to elucidate how various instructional strategies may affect the cultivation of critical thinking tendencies in students. This comprehension will be derived from pertinent frameworks and contemporary research.

2.1. Critical thinking disposition

According to Facione et al. (1996), critical thinking dispositions are “the consistent internal motivation to employ one’s critical thinking abilities in judging what to believe or to do in any situation.” Critical thinking dispositions refer to attitudes (habits of mind), flexibility, a tendency to look for reasons, an open mind to being knowledgeable, respect, and a willingness to pay attention to other points of view (Ennis, 1996; Facione et al., 1995b; Lai, 2011; Siegel, 1999). Facione et al. (1995) named seven criteria to assess critical thinking tendencies,

including truth-seeking, open-mindedness, analyticity, systematicity, self-confidence, inquisitiveness, and maturity. However, Walsh et al. (2007) discovered some assessment overlaps in the California Critical Thinking Disposition Inventory instrument due to the study's lack of updates. Hence, Sosu (2013) amended the criteria for measuring critical thinking dispositions to include critical openness and reflective skepticism.

Specifically, critical openness refers to certain tendencies that are incorporated with different concepts to build original ideas and products, and to be willing to engage with these tendencies considerably—leading to organizing and refining new concepts through explicit data or evidence (Álvarez-Huerta et al., 2022; Quinn et al., 2020; Sosu, 2013). When learners gain critical openness, they enhance cognitive flexibility in thinking; as a result, they begin reducing inflexibility in critical thinking (Price et al., 2015). Learners accept all forms of feedback, including positive performance feedback and constructive criticism, with consideration. They develop new concepts by correcting the depth of their beliefs or knowledge (Álvarez-Huerta et al., 2022; Kruglanski & Boyatzi, 2012; Quinn et al., 2020). Moreover, Riggs (2010, p. abstract) emphasized that critical openness can be considered “an attitude toward oneself as a believer, rather than toward any particular belief.” By gaining attitudes of critical openness, learners are required to value epistemology, be ready to act as virtuous agents, and develop specific skills and characteristics of critical openness (Riggs, 2010).

In addition, reflective skepticism refers to the attitude of not wanting to accept something or being unwilling to believe it (Williams, 2017). It measures a tendency to treat questions with confident evidence or information, learning from past experiences (Álvarez-Huerta et al., 2022; Sosu, 2013). When learners increase reflective skepticism, they engage in challenging their understanding or ideas. They always require different, reasonable, and sufficient evidence before making judgments. They reject all evaluations based on insufficient, unclear, unverified, or unreasonable evidence and seek multiple perspectives to ensure accuracy (Álvarez-Huerta et al., 2022; Quinn et al., 2020). As Thomas and Hayes (2021) stated, these characteristics can predict cognitive and flexible thinking demands. Furthermore, as recommended by Bravo et al. (2020), this factor structure can be beneficial in measuring adolescent critical thinking dispositions.

2.2. Instructional behaviors

According to Chan et al. (2023), supportive and effective instructional behaviors in teaching for learning include learning involvement, structure, and autonomy, grounded in self-determination theory.

Learning structure refers to the use of explicit information that guides learners in performing tasks under the teacher's directive, to enhance the intended learning outcomes of a given course (Jang et al., 2010). Teachers who are structured in their instructional methods provide instrumental support, constructive feedback, and clear explanations regarding instructions, guidelines, and expectations to improve students' learning outcomes (Chan et al., 2023; Mouratidis et al., 2013; Ryan & Deci, 2020; Van Tassel Baska et al., 2006). In addition, Sablić et al. (2021) found that video-based instruction can enhance the proficiency of both teachers and students and improve classroom progress. Video lectures are considered a more attractive form of online instruction compared to others (Chan, 2010) and serve as a reliable instructional design to support teaching (Sablić et al., 2021). When preparing video lessons, teachers should begin with a brief and targeted learning goal, use an appropriate tone and voice in explanations, emphasize key concepts using signaling, increase engagement through a conversational and enthusiastic style, and integrate active learning components such as interactive elements,

guiding questions, or relevant homework assignments (Brame, 2016). Despite some challenges with interest assessment, teachers can record video lessons, store them, and upload them for student access (Zaneldin et al., 2019). Simultaneously, video-based learning offers clear textual and visual criteria, helping learners solidify understanding, increasing motivation, engagement, and learning satisfaction (Chen, 2012). In this sense, such constructs are used to predict learning structure, which supports pre-video lectures. Previous studies have shown that flipped classroom-based video lectures improve critical thinking dispositions (Dehghanzadeh & Jafaraghaee, 2018). Moreover, Heng (2014) found that support and feedback are key constructs for academic engagement and achievement. In this context, the quality of feedback and learner engagement are primary factors influencing reading involvement (Crook et al., 2012). Prior research also suggests that support and feedback can contribute to enhancing critical thinking dispositions (Janse Van Rensburg & Rauscher, 2022).

Autonomy support is the initial strategy used to foster internal motivation. It refers to the degree of freedom learners have in and out of classroom activities, within guided instructional frameworks and learning choices (Deci & Ryan, 1985). Rather than relying on controlling interventions, autonomy support encourages teachers to understand learners' needs in alignment with their preferences and satisfaction (Chan et al., 2023; Skinner & Belmont, 1993). Teachers are expected to offer multiple choices and rationales, allowing students to pursue options that resonate with their attitudes, perspectives, and cognitive preferences (Moon & Ke, 2020; Patall & Zambrano, 2019; Skinner & Belmont, 1993). As a result, autonomy enables learners to develop strong decision-making capabilities, encouraging them to act based on their situations and opportunities. Learners use information from the environment to inform their decisions in terms of timing and context. They become more flexible, reduce resistance, and increase intrinsic motivation, aligning with self-determination theory to manage their learning environment (Ryan & Deci, 2020). Additionally, autonomy support can enhance perceived academic competence through intrinsic motivation (Guay et al., 2001). Teachers should provide autonomy support through (1) motivational encouragement, (2) using informational rather than controlling language, and (3) helping learners understand the subjective value of tasks and learning techniques (Taboada Barber et al., 2015). Previous studies have found autonomy support to be one of the most important factors in enhancing critical thinking dispositions (Xu & Yang, 2024).

Learning involvement refers to the connection, relationships, and collaborative opportunities between learners and peers, as well as learners and teachers, within and beyond the classroom environment (Mason, 2013; Pohan, 2003). According to Pohan (2003), teachers should demonstrate care and move away from conventional methods of managing discipline and behavior. Instead, they should provide students with the necessary knowledge, skills, and dispositions. All stakeholders should place equal emphasis on students' social, emotional, ethical, and psychological growth, not just academic success. Furthermore, intentional and constructive cooperation among learners is a key factor in learning involvement (Moon & Ke, 2020). Active participation, such as discussions, interactive activities, and collaboration using social skills, is a valuable aspect of classroom engagement (Moon & Ke, 2020). Theoretically, working with students emphasizes what learners can do rather than what they must do for teachers or coursework. This approach motivates students to focus on their success and invest time and effort into the learning process (Arnold, 2014). Likewise, cooperative learning should be implemented appropriately to enhance learning involvement (Chan et al., 2023). Previous studies have shown that cooperative support can effectively improve critical thinking dispositions (Pakmehr et al., 2015).

3. Methodology

This section provides an overview of the methodological procedures that were utilized in the research project. These procedures include the research design, sampling strategy, instrumentation, data collection methodologies, and analytic methods. To investigate the connections between instructional behaviors and critical thinking dispositions among Cambodian high school students, a quantitative approach was chosen as the method of investigation. The data were obtained through the use of a self-report questionnaire, and several statistical analyses were carried out to evaluate the validity, reliability, and predictive capacity of instructional practices on the critical thinking dispositions of students.

3.1. Research design

The sample size was determined using the rule of thumb for selecting an appropriate sample size. According to Hair et al. (2017) and Tanaka (1987), a suitable sample should be ten to twenty times the number of items in the research model. In this study, 34 items were measured across nine main constructs. Therefore, an appropriate sample size for this study was 515 participants. Convenience random sampling was employed to select participants from students in the 8th, 9th, and 10th grades in high schools (8th grade = 143, 9th grade = 123, and 10th grade = 210), with an age range of 13 to 18 years ($M = 1.57$, $SD = 0.50$). Missing data accounted for less than 5%, as confirmed through data analysis.

To support this study, data were collected via a self-report questionnaire administered to high school students in Cambodia. The study was approved by the university's Board of Ethics. Permission was obtained from school principals to collaborate with the high schools. Students who voluntarily participated in the study responded to the survey questionnaire.

3.2. Research instrument

To utilize the measures in Cambodia, all items were statistically adapted using JASP (Love et al., 2019) in conjunction with R package software for data analysis to assess the instrument's validity between instructional behaviors (i.e., support and feedback, autonomy support, video lecture, and cooperative support) and critical thinking dispositions (i.e., reflective skepticism and critical openness). The translation and back-translation method were employed to adapt all items (Behling & Law, 2006). First, the researchers adapted the English version and translated it into Khmer by experts. Then, the Khmer version was back-translated into English by other experts. Second, two bilingual Khmer and English teachers were invited to review both versions. Third, two experts were consulted to adjust the operational definitions and all items to ensure content validity. Fourth, face validity was confirmed through 50 students to assess how well the measures were understood and perceived as valid and reliable. Finally, 515 students voluntarily participated in the study to provide data for measurement validation. A self-report method was used to assess students' perceptions of all items using a 5-point Likert scale, ranging from 1 "strongly disagree" to 5 "strongly agree".

Table 1. HTMT, correlation, and validity-reliability results

Variables	SF	AS	VL	CS	RS	CO
SF	$\frac{3}{4}$	0.29**	0.18**	0.48**	0.41**	0.41**

AS	0.46	$\frac{3}{4}$	0.34**	0.23**	0.27**	0.32**
VL	0.30	0.49	$\frac{3}{4}$	0.23**	0.26**	0.25**
CS	0.71	0.28	0.28	$\frac{3}{4}$	0.61**	0.58**
RS	0.61	0.35	0.38	0.82	$\frac{3}{4}$	0.70**
CO	0.59	0.41	0.323	0.77	0.97	$\frac{3}{4}$
Mean	4.13	0.47	3.34	3.95	3.90	3.95
SD	0.392	0.66	654	0.465	0.438	0.407
Skewness	0.006	-0.307	-0.315	-0.171	-0.056	0.105
Kurtosis	0.738	0.290	0.773	0.831	1.14	0.483
AVE	0.23	0.39	0.40	0.40	0.32	0.28
$\sqrt{\text{AVE}}$	0.48	0.62	0.63	0.63	0.57	0.53
α	0.63	0.72	0.80	0.76	0.70	0.73
ω	0.65	0.71	0.80	0.77	0.70	0.72

Notes: ** $p < .01$; SF = Support and Feedback; AS = Autonomy support; VL = Video lecture; CS = Cooperative support; RS = Reflective skepticism; CO = Critical openness; SD = Standard Deviation; Skewness = Data normality of Skewness value; Kurtosis = Data normality of Kurtosis value; AVE = Average Variance Extracted; $\sqrt{\text{AVE}}$ = Square root of Average Variance Extracted; α = Cronbach's alpha internal consistency reliability; ω = McDonald Omega coefficient construct or composite reliability.

Before conducting validation through confirmatory factor analysis (CFA), skewness and kurtosis values were examined, ranging from -0.315 to 0.105 and 0.290 to 1.14, respectively. These values indicated that the assumption of data normality was met, as skewness and kurtosis values fell within the acceptable range of ± 1 and ± 2 , respectively, according to J. F. Hair et al. (2019). Furthermore, discriminant validity was assessed using Pearson's correlation and the Heterotrait-Monotrait ratio (HTMT) among different constructs. Henseler et al. (2015) and Kline (2016) asserted that intercorrelations below 0.90 or the threshold of 0.85 indicate acceptable discriminant validity. Table 1 shows the highest correlation between reflective skepticism and critical openness, ranging from 0.70 to 0.97; however, both constructs fall under the broader category of critical thinking disposition. Therefore, this correlation may still be considered acceptable. Additionally, Fornell and Larcker (1981) recommended that the square root of the AVE of each construct should be greater than or equal to the highest correlation with any other construct. Table 1 indicates that some of the highest correlations are slightly greater than the square root of the average variance extracted, indicating minimal but acceptable discriminant validity.

To ensure consistent measurement, convergent validity was also evaluated. According to Hair (2010), convergent validity is supported when standardized factor loadings are above 0.4 or

preferably 0.70, average variance extracted (AVE) values exceed 0.50, and composite reliability is above 0.70. As shown in Table 1, standardized loadings mostly range from 0.401 to 0.703, and composite reliability values range from 0.70 to 0.80. However, all AVE values are below 0.50, indicating minimal acceptable convergent validity.

Importantly, CFA was used to validate all the measures in context. Model fit was assessed using chi-square (χ^2), Comparative Fit Index (CFI), Tucker-Lewis Index (TLI), Standardized Root Mean Square Residual (SRMR), and Root Mean Square Error of Approximation (RMSEA), as recommended by Hair et al. (2019) and Kline (2023). For samples with more than 250 participants and over 30 observed variables, acceptable fit indices include a significant chi-square, CFI and TLI values above 0.92, $SRMR \leq 0.08$, and $RMSEA \leq 0.07$. According to Kline (2016), RMSEA values below 0.05 indicate excellent fit, while values below 0.08 suggest acceptable fit. In this study, CFA results revealed an acceptable model fit: $\chi^2(480, 515) = 773.902$, $p < .001$, CFI = 0.90, TLI = 0.89, SRMR = 0.054, and RMSEA = 0.035.

3.3. Instructional behaviors

Scales on instructional behaviors were adapted from prior studies (Chan et al., 2023; Heng, 2014; Long et al., 2016). Instructional behaviors were measured in terms of students' perceptions of their teachers' support and feedback (6 items, e.g., 'Your teacher offered helps to you when you had (a) problem (s) with your homework or exercise') (Heng, 2014), of their teachers' autonomy support (4 items, e.g., 'Your teacher accepted your suggestions on how to do homework or exercise that you sought') (Chan et al., 2023), of their teacher's video lecture support (6 items, e.g., The lesson were well-explained in the video lecture) (Long et al., 2016), and of their involvement in cooperative support (5 items, e.g., 'When you did group work, you discussed your ideas with other students in your group') (Chan et al., 2023). Cronbach's alpha values for support and feedback, autonomy support, video lecture, and cooperative support were 0.63, 0.72, 0.80, and 0.77, respectively, suggesting acceptable and good internal consistency.

3.4. Critical thinking dispositions

Scales on critical thinking dispositions were adapted from a previous study (Sosu, 2013). Students' critical thinking dispositions were tapped through their perceived reflective skepticism (5 items, e.g., 'You often think about your actions to see whether you could improve them.'), and perceived critical openness (7 items, e.g., 'It's important to understand other people's viewpoint.'). The Cronbach's alpha values for reflective skepticism and critical openness were 0.70 and 0.72, respectively, which indicated good internal consistency.

3.5. Data gathering procedures and ethical considerations

In support of this study, data collection was gathered through surveys from high school students in Cambodia by using a self-report questionnaire. The university's Board of Ethics ID: 136/2023 RUPP KS approved this study. A permission letter was requested to collaborate with the school principals at the high school. Volunteered students who participated in this study were treated with a survey questionnaire.

3.6. Data analysis

Data analysis with statistical processes was applied to the data to address the research questions. We studied the relationship between aspects of instructional behavior and critical

thinking disposition and examined the different instructional support and critical thinking dispositions between grades and the effects of instructional behaviors in predicting critical thinking dispositions when controlling for grades. First, intercorrelations between constructs are affirmed when their correlations are lower than 0.90 or a threshold of 0.85 (Kline, 2016). Then, the one-way MANOVA analysis was used to compare the grades between instructional behaviors and critical thinking dispositions. Box's M test was judged for homogeneity tests via Pillai's Trace and Wilks' Lambda multivariate tests between grades (Tabachnick & Fidell, 2014). Furthermore, tests between constructs effects and Levene's test were used to judge assumptions in order to determine if grades are adequate differences between groups. To specify more accuracy, multiple comparisons between groups were analyzed through heterogeneity, whether equal variance was assumed or not (Kline, 2023). Calculatedly, that might compare between groups' means if the samples' largest and smallest comparisons are lower than 1.5, respectively (Pituch & Stevens, 2016). When homogeneity of equal variance-covariance is assumed in comparing sample data between group means, Bonferroni's post-hoc multiple comparison method was used to calculate (Tabachnick & Fidell, 2014). Additionally, to ensure the model can be measured through hierarchical multiple regression, multicollinear problems were assumed when the variance inflation factor (VIF) is greater than 1.5. Lastly, hierarchical multiple regression was utilized to control grades in the model. Data analysis was performed using SPSS version 27.

4. Findings

Q1: What is the relationship between measures of instructional behavior and critical thinking dispositions?

Table 2: Multivariate tests of grade effects on instructional behaviors and critical thinking dispositions

Effect		Value	F	Hypothesis df	Error df	p.	η^2
Grades	Pillai's Trace	0.086	3.593	12.000	964.000	0.000	0.043
	Wilks' Lambda	0.915	3.620	12.000	962.000	0.000	0.043
	Hotelling's Trace	0.091	3.647	12.000	960.000	0.000	0.044
	Roy's Largest Root	0.076	6.074	6.000	482.000	0.000	0.070

Note: Box's M: (42, 528137.365) = 71.255, F = 1.665, $p < 0.05$

This study aimed to examine whether critical thinking dispositions (i.e., critical openness and reflective skepticism) are associated with instructional behavior (i.e., support and feedback, autonomy support, video lecture, and cooperative support). The satisfactory result was revealed between constructs. All subconstructs indicated the intercorrelation from low to strong (0.18 to 0.70) through Pearson's correlation (see Table 1). Moreover, the perceptions of support and feedback, autonomy support, video lecture support, and cooperative support were positively correlated with reflective skepticism and critical openness.

Q2: Are there differences between grades' instructional behaviors and critical thinking dispositions?

Table 3. Levene's Test for Equality of Error Variances by Grade

Variables	Levene Statistic	df1	df2	p.
Support and feedback	0.429	2	486	0.651
Autonomy support	1.960	2	486	0.142
Video lecture	1.493	2	486	0.226
Cooperative support	0.627	2	486	0.535
Reflective skepticism	9.511	2	486	0.000
Critical openness	2.248	2	486	0.107

To determine whether grades show ample differences, one-way MANOVA analysis was used to compare the grades between instructional behaviors (i.e., support and feedback, autonomy support, video lecture, and cooperative support) and critical thinking dispositions (i.e., critical openness and reflective skepticism). Box's M test was used to judge homogeneity tests via Pillai's Trace and Wilks' Lambda multivariate tests between grades. Table 2 shows Box's M test: $(42, 528137.365) = 71.255$, $F = 1.665$, $p < .05$, as well as, via Pillai's Trace and Wilks' Lambda multivariate tests between grades were significant (Tabachnick & Fidell, 2014). Furthermore, tests between constructs effects and Levene's test were used to judge assumptions in order to determine if grades show a significant difference between groups. As can be seen, Table 3 revealed Levene's test of quality of error variances was non-significant and the test between-subject effects between grades was significant, affirming that equal variance was assumed. Not only this, but to modify how different levels among grades, post-hoc comparison between groups was utilized. Table 5 showed that grade 8 and grade 9 had no significant difference between instructional behaviors and critical thinking dispositions. Notably, both grades 8 and 9 were significantly different compared to grade 10.

Table 4: Between-Subjects Effects of Grade on Instructional Behaviors and Critical Thinking Dispositions

Source	Dependent Variable	SS	df	MS	F	p.	η^2
Grade	Support and feedback	1.864	2	0.932	5.457	0.005	0.022
	Autonomy support	5.191	2	2.596	5.965	0.003	0.024
	Video lecture	8.599	2	4.299	10.414	0.000	0.041
	Cooperative support	3.401	2	1.700	8.218	0.000	0.033
	Reflective skepticism	3.474	2	1.737	9.711	0.000	0.038

	Critical openness	1.902	2	0.951	5.915	0.003	0.024
Error	Support and feedback	83.023	486	0.171	n/a	n/a	n/a
	Autonomy support	211.474	486	0.435	n/a	n/a	n/a
	Video lecture	200.632	486	0.413	n/a	n/a	n/a
	Cooperative support	100.554	486	0.207	n/a	n/a	n/a
	Reflective skepticism	86.924	486	0.179	n/a	n/a	n/a
	Critical openness	78.120	486	0.161	n/a	n/a	n/a

Note: SS = Type III Sum of Squares; MS = Mean Square; η^2 = Partial Eta Squared

Q3: Is grade a covariate variable when predicting instructional behaviors on critical thinking dispositions?

As can be seen in Table 5, the comparison between grades might be considered a covariate variable. This means the distinction between grades might impact predictive analysis. However, Table 6 shows that grades are not ought to be judged as a covariate variable. Lack of significance in terms of interaction between the grades and instructional behaviors (i.e., support and feedback, autonomy support, video lecture, and cooperative support) during regressing critical thinking dispositions (i.e., critical openness and reflective skepticism). Hence, grades might not be a covariate in predictive analysis through a multiple regression study.

Table 5. Post-hoc Grade Comparisons on Instructional Behaviors and Critical Thinking Dispositions

Variables	Grades comparison	MD	SE	95% Confidence Interval	
				Low	High
Support and feedback	Grade 8 vs. Grade 9	0.0216	0.04976	-0.1006	0.1438
	Grade 8 vs. Grade 10	-0.1137*	0.04406	-0.2219	-0.0055
	Grade 9 vs. Grade 10	0.1353*	0.04642	0.0214	0.2493
Autonomy support	Grade 8 vs. Grade 9	-0.1071	0.07942	-0.3021	0.0879
	Grade 8 vs. Grade 10	-0.2405*	0.07031	-0.4131	-0.0678
	Grade 9 vs. Grade 10	-0.1333	0.07408	-0.3152	0.0486
Video lecture	Grade 8 vs. Grade 9	0.0782	0.07736	-0.1117	0.2682

Cooperative support	Grade 8 vs. Grade 10	-0.2253*	0.06849	-0.3935	-0.0572
	Grade 9 vs. Grade 10	0.3036*	0.07216	0.1264	0.4808
	Grade 8 vs. Grade 9	-0.0292	-0.0292	-0.0292	-0.0292
	Grade 8 vs. Grade 10	-0.1802*	-0.1802*	-0.2993	-0.0612
	Grade 9 vs. Grade 10	-0.1511*	-0.1511*	-0.2765	-0.0256
Reflective skepticism	Grade 8 vs. Grade 9	0.0046	0.05092	-0.1204	0.1296
	Grade 8 vs. Grade 10	-0.1680*	0.04508	-0.2787	-0.0574
	Grade 9 vs. Grade 10	-0.1726*	0.04750	-0.2893	-0.0560
Critical openness	Grade 8 vs. Grade 9	-0.0513	0.05002	-0.1715	0.0689
	Grade 8 vs. Grade 10	-0.1432*	0.04226	-0.2446	-0.0418
	Grade 9 vs. Grade 10	-0.0919	0.04592	-0.2022	0.0185

Note: * $p < 0.05$ MD = Mean Difference; SE = Standardized Error

Q4: Which aspects of instructional behaviors might predict critical thinking dispositions?

This study aimed to examine whether critical thinking dispositions (i.e., critical openness and reflective skepticism) are associated with instructional behaviour (i.e., support and feedback, autonomy support, video lecture, and cooperative support). The result revealed the satisfaction with the measurement model. As can be seen, the result exposed instructional behaviors explained the variance with 39% of critical openness ($R^2 = 0.39$, $\Delta R^2 = 0.003$, $F(4, 515) = 38.530$, $P < 0.001$) and 41% of reflective skepticism (41% of variance) ($R^2 = 0.41$, $\Delta R^2 = 0.005$, $F(4, 515) = 83.934$, $P < 0.001$). Also, variance inflation factors (VIF) ranged from 1.204 to 1.460, a value of 1.5, confirming the multicollinear problem in the measurement model. Interestingly, critical openness was associated with support and feedback ($\beta = 0.12$, $p < 0.05$), autonomy support ($\beta = 0.15$, $p < 0.01$), and cooperative support ($\beta = 0.48$, $p < 0.01$) significantly. Simultaneously, reflective skepticism was associated with support and feedback ($\beta = 0.13$, $p < 0.05$), autonomy support ($\beta = 0.07$, $p < 0.05$), video lecture ($\beta = 0.09$, $p < 0.05$), and cooperative support ($\beta = 0.51$, $p < 0.01$), significantly.

Table 6. Hierarchical multiple regression analysis

Constructs	Critical openness					Reflective skepticism				
	β	F-value	R^2	ΔR^2	VIF	β	F-value	R^2	ΔR^2	VIF
Model 1										
Support and feedback	0.109*	76.755**	0.3860	0.3861	1.4070	0.121*	83.934**	0.4060	0.4061	1.411
Autonomy support	0.161**				1.2790	0.077*				1.279

Video lecture	0.060	1.2040.094*	1.211
Cooperative support	0.474**	1.3390.510**	1.342
Model 2			
Support and feedback	0.116* 38.530**0.3890.0031.4540.127* 42.462**0.4100.005		1.460
Autonomy support	0.153**	1.3430.074*	1.346
Video lecture	0.059	1.2190.092*	1.228
Cooperative support	0.475**	1.3410.509**	1.344
Support and feedback x Grade	0.006	1.4370.067	1.424
Autonomy support x Grade	-0.039	1.3350.003	1.329
Video lecture x Grade	-0.024	1.244-0.008	1.241
Cooperative support x Grade	0.029	1.315-0.067	1.303

Note: *p > 0.05, **p > 0.01

5. Discussion

This study aimed to examine whether critical thinking dispositions (i.e., critical openness and reflective skepticism) are associated with instructional behaviors (i.e., support and feedback, autonomy support, video lecture, and cooperative support). As researchers reviewed, these instructional supports were used to study with some levels of students; however, they were rarely studied with critical thinking dispositions. So, this design expressed a preferent result. A similar level of study between grades might lead to different results. Interestingly, most instructional behaviour can predict critical dispositions. Critical openness was associated with support and feedback, autonomy support, and cooperative support. This is more likely the learners' perceived specific trends in different concepts to generate a new idea on their own when they encounter them through adequate instruction, such as constructive feedback, encouragement, and instant and structured support, as well as an autonomous learning style in their responsibility. Furthermore, allowing cooperative support in their collaborative group was a more accurate study through peer teaching and peer responsibility during the group discussion in terms of academic education. In this sense, it might be reliable and matched to previous studies (e.g., Chan et al., 2023; Moon & Ke, 2020; Pakmehr et al., 2015; Xu & Yang, 2024)

On the other hand, reflective skepticism was also associated with all instructional behaviors. This is more likely learners might perceive their willingness to treat the questioning through confident evidence or information to be learnt from past experiences when they are familiar with ample instructional behaviors through teachers, like support and constructive feedback, freedom of learning in and out of the class through their own decisions with learning tasks, groups, or peers, well-supported through video lectures in different places, flexible support

linking their interests and learning tasks, as well as cooperative support via group study in terms of academic study in-and-out of the learning courses. Hence, findings revealed in confirming and matching through previous studies (e.g., Chan et al., 2023; Dehghanzadeh & Jafaraghaee, 2018; Janse Van Rensburg & Rauscher, 2022; Moon & Ke, 2020; Pakmehr et al., 2015; Xu & Yang, 2024).

6. Conclusion and recommendation

This research study was very impressive in seeking new supports for the educational sector with three layers: academic level, educational policy level, and theoretical and practical level. As well, researchers suggest and recommend the following:

A can be proposed through this study: (1) to study the relationship between instructional behaviours, learning motivations, and critical thinking dispositions, and (2) to examine the effects of instructional behaviors and learning motivations on critical thinking dispositions. After surveying among secondary and high school students in the amount of 515, the findings indicated the need for practitioners or teachers to improve their teaching in general knowledge, and lead to improving the feasibility of education to reach world competition and be honorable for Cambodian education. To promote the critical thinking dispositions, researcher recommend that teachers should (1) be concerned with learning choice with tasks (i.e., homework, exercise, peer-work, and group-work) that can build their interest to concentrate on learning process, (2) support with sufficient learning structure that teachers require to offer clear support, such video lecture with clear explanation, linking with homework or exercise in the textbooks, being available for free-time and free-places through learning courses, as well as adequate support and feedback (i.e., constructive and timely feedback, encouraging to ask the question) on what they do with learning, especially reading course (3) provide an involvement with them that teachers permit them to get an opportunity to build group learning cooperatively (i.e., cooperative learning, peer support such as peer-constructive feedback, peer-teaching, and peer-assistance) that deals with their thinking styles as critical thinking dispositions (i.e., self-evaluation, reasoning thinking, optimal cognition, mind-understanding, and evidence-based decision) during the academic year in general knowledge educations to enhance the efficient and effective instructions to fulfill national and international goals to promote human's critical thinking, especially teenagers who are over 15 years old.

As can be revealed above, this study aims to examine the effects of instructional behaviors on critical thinking dispositions. As we have exhibited in the views of this study that revealed instructional behaviors grounded by self-determination theory were suited to the contextual study. Among indicators of instructional behaviors that should be promoted through educational curriculum and instruction by increasing teaching training courses or seminars. Likewise, this research study was taken as part of innovation in the educational sector in Cambodia. Policymakers and stakeholders, and MoEYS, who would like to improve pedagogical knowledge for teachers' training, should make decisions through each indicator to adapt training to them. When they study this finding, they will set up their teaching at a public school to make a huge change in students' learning in general knowledge. They might be attracted to most of the students in high school to pursue their studies. Not only that, it can lessen the student's drop-out rates and promote enormous human resources for Cambodia. Hence, it can lead Cambodia's students to be caught up in various opportunities to learn many skills that are appropriate with the latest changes in the world and the Sustainable Development Goals.

Seriously, a theoretical study was contemplated as the main product of the research study. Little is known about how self-determination theory can be supported in educational context. After research, studies should increase specific indicators among subscales of each main construct. To keen specific evidence and create new correlations out of instructional behaviors critical thinking dispositions.

6.1. Limitations and suggestions for future research

Similar to most studies, this correlation design with this model was limited to the general educational level. However, we have seen that some effects of constructs were shown to be insufficient to promote, so researchers should try to develop this study instrument that can ensure the reliability and validity of measurement with participants. Moreover, researchers suggest that future research should apply this model to different students' levels. Otherwise, if the next study would like to replicate this study, they should adapt the research instrument with teachers in secondary school and high school to ensure the logic of measurement of the instrument. On the other hand, the next study should use a mixed-methods study to clarify some effects that did not appear in this study. Last, but not least, get a dominant benefit from this study to develop the teaching style for all teachers at the same level of study that can make sure numerous high school students can receive real education in Cambodia to be appropriate with the Sustainable Development Goals.

Acknowledgments

The authors would like to express their deepest gratitude to blind reviewers and the editorial team of CJESS for reviewing and proofreading this article. Without their contributions, this article would not have appeared in academic circles. Therefore, their contributions are considered irreplaceable and helpful for the whole society, especially the scholarly society of research and publication.

Conflict of interest

No potential conflict of interest was reported by the authors.

Funding

The authors received no financial support for the study, authorship, and/or publication of this article.

Declaration of AI usage

The authors used Grammarly to polish the language in some parts of the article. However, they declared that the content of the article is totally theirs.

References

- Aghajani, M., & Gholamrezapour, E. (2019). Critical thinking skills, critical reading, and foreign language reading anxiety in the Iranian context. *International Journal of Instruction*, 12(4), 219–238. <https://doi.org/10.29333/iji.2019.12414a>
- Aloqaili, A. S. (2012). The relationship between reading comprehension and critical thinking: A theoretical study. *Journal of King Saud University: Languages and Translation*, 24(1), 35–41. <https://doi.org/10.1016/j.jksult.2011.01.001>

- Álvarez-Huerta, P., Muela, A., & Larrea, I. (2022). Disposition toward critical thinking and creative confidence beliefs in higher education students: The mediating role of openness to diversity and challenge. *Thinking Skills and Creativity*, 43, 1–9. <https://doi.org/10.1016/j.tsc.2022.101003>
- Arnold, K. (2014). *College student development and academic life: Psychological, intellectual, social, and moral issues*. Routledge. <https://doi.org/10.4324/9781315051888>
- Arslan, S., & Demirtas, Z. (2016). Social emotional learning and critical thinking disposition. *Studia Psychologica*, 58(4), 276–285. <https://doi.org/10.21909/sp.2016.04.723>
- Basu Roy, R., & McMahon, G. T. (2012). Video-based cases disrupt deep critical thinking in problem-based learning. *Medical Education*, 46(4), 426–435. <https://doi.org/10.1111/j.1365-2923.2011.04197.x>
- Behling, O., & Law, K. S. (2006). *Translating questionnaires and other research instruments: Problems and solutions*. Sage Publications.
- Brame, C. J. (2016). Effective educational videos: Principles and guidelines for maximizing student learning from video content. *CBE: Life Sciences Education*, 15(4), 1–6. <https://doi.org/10.1187/cbe.16-03-0125>
- Bravo, M. J., Galiana, L., Rodrigo, M. F., Navarro-Pérez, J. J., & Oliver, A. (2020). An adaptation of the Critical Thinking Disposition Scale in Spanish youth. *Thinking Skills and Creativity*, 38, 1–12100748. <https://doi.org/10.1016/j.tsc.2020.100748>
- Chan, S., Maneewan, S., & Koul, R. (2023). An examination of the relationship between the perceived instructional behaviors of teacher educators and pre-service teachers' learning motivation and teaching self-efficacy. *Educational Review*, 75(2), 264–286. <https://doi.org/10.1080/00131911.2021.1916440>
- Chan, Y. M. (2010). Video instructions as support for beyond-classroom learning. *Procedia - Social and Behavioral Sciences*, 9, 1313–1318. <https://doi.org/10.1016/j.sbspro.2010.12.326>
- Chen, Y.-T. (2012). The effect of thematic video-based instruction on learning and motivation in e-learning. *International Journal of the Physical Sciences*, 7(6), 957–965. <https://doi.org/10.5897/IJPS11.1788>
- Cheng, M. H. M., & Wan, Z. H. (2017). Exploring the effects of classroom learning environment on critical thinking skills and disposition: A study of Hong Kong 12th graders in liberal studies. *Thinking Skills and Creativity*, 24, 152–163. <https://doi.org/10.1016/j.tsc.2017.03.001>
- Crook, A., Mauchline, A., Maw, S., Lawson, C., Drinkwater, R., Lundqvist, K., Orsmond, P., Gomez, S., & Park, J. (2012). The use of video technology for providing feedback to students: Can it enhance the feedback experience for staff and students? *Computers & Education*, 58(1), 386–396. <https://doi.org/10.1016/j.compedu.2011.08.025>
- Deci, E. L., & Ryan, R. M. (1985). *Intrinsic motivation and self-determination in human behavior*. Springer. <https://doi.org/10.1007/978-1-4899-2271-7>
- Dehghanzadeh, S., & Jafaraghaee, F. (2018). Comparing the effects of traditional lecture and flipped classroom on nursing students' critical thinking disposition: A quasi-experimental study. *Nurse Education Today*, 71, 151–156. <https://doi.org/10.1016/j.nedt.2018.09.027>
- Em, S., & Khampirat, B. (2025). Exploring the motivation for English reading among Cambodian undergraduates: A cross-sectional study. *The New English Teacher*, 19(2), 1–17.
- Ennis, R. H. (1996). Critical thinking dispositions: Their nature and assessability. *Informal Logic*, 18(2), 165–182 <https://doi.org/10.22329/il.v18i2.2378>

- Facione, P. A. (2000). The disposition toward critical thinking: Its character, measurement, and relationship to critical thinking skills. *Informal Logic*, 20(1), 61–84.
<https://doi.org/10.22329/il.v20i1.2254>
- Facione, P. A., Facione, N. C., & Giancarlo, C. A. F. (1996). The motivation to think about working and learning. *New Directions for Higher Education*, 67–79.
<https://doi.org/10.1002/he.36919969608>
- Facione, P. A., Sánchez, C. A., Facione, N. C., & Gainen, J. (1995). The disposition toward critical thinking. *The Journal of General Education*, 44(1), 1–25.
<http://www.jstor.org/stable/27797240>.
- Fornell, C., & Larcker, D. F. (1981). Evaluating Structural Equation Models with Unobservable Variables and Measurement Error. *Journal of Marketing Research*, 18(1), 39–50. <https://doi.org/10.1177/002224378101800104>
- Ghorbandordinejad, F., & Heydari, M. (2012). On the relationship between Iranian EFL students' critical thinking ability and their reading comprehension micro-skills. *Philippine ESL Journal*, 9(3), 130–141.
- Guay, F., Boggiano, A. K., & Vallerand, R. J. (2001). Autonomy support, intrinsic motivation, and perceived competence: Conceptual and empirical linkages. *Personality and Social Psychology Bulletin*, 27(6), 643–650.
<https://doi.org/10.1177/0146167201276001>
- Hair, J. F. (2010). *Multivariate data analysis*. Prentice Hall.
- Hair, J. F., Black, W. C., Babin, B. J., & Anderson, R. E. (2019). *Multivariate data analysis*. Cengage.
- Hair, J., Hollingsworth, C. L., Randolph, A. B., & Chong, A. Y. L. (2017). An updated and expanded assessment of PLS-SEM in information systems research. *Industrial Management & Data Systems*, 117(3), 442–458. <https://doi.org/10.1108/IMDS-04-2016-0130>
- Heng, K. (2014). The effects of faculty behaviors on the academic achievement of first-year Cambodian urban university students. *Educational Research for Policy and Practice*, 13(3), 233–250. <https://doi.org/10.1007/s10671-013-9159-z>
- Henseler, J., Ringle, C. M., & Sarstedt, M. (2015). A new criterion for assessing discriminant validity in variance-based structural equation modeling. *Journal of the Academy of Marketing Science*, 43(1), 115–135. <https://doi.org/10.1007/s11747-014-0403-8>
- Jang, H., Reeve, J., & Deci, E. L. (2010). Engaging students in learning activities: It is not autonomy support or structure, but autonomy support and structure. *Journal of Educational Psychology*, 102(3), 588–600. <https://doi.org/10.1037/a0019682>
- Janse Van Rensburg, J., & Rauscher, W. (2022). Strategies for fostering critical thinking dispositions in the technology classroom. *International Journal of Technology and Design Education*, 32(4), 2151–2171. <https://doi.org/10.1007/s10798-021-09690-6>
- Kamgar, N., & Jadidi, E. (2016). Exploring the relationship of Iranian EFL learners' critical thinking and self-regulation with their reading comprehension ability. *Procedia - Social and Behavioral Sciences*, 232, 776–783.
<https://doi.org/10.1016/j.sbspro.2016.10.105>
- Kline, R. B. (2016). *Principles and practice of structural equation modeling*. Guilford Press.
- Kline, R. B. (2023). *Principles and practice of structural equation modeling*. The Guilford Press.
- Kruglanski, A. W., & Boyatzis, L. M. (2012). The psychology of closed and open-mindedness, rationality, and democracy. *Critical Review*, 24(2), 217–232.
<https://doi.org/10.1080/08913811.2012.711023>

- Lai, E. R. (2011). Critical thinking: A literature review. *Pearson's Research Reports*, 6(1), 40–41. https://www.cisdctl.com/uploads/1/3/3/4/133401/critical_thinking.pdf
- Long, T., Logan, J., & Waugh, M. (2016). Students' perceptions of the value of using videos as a pre-class learning experience in the flipped classroom. *Tech-Trends*, 60(3), 245–252. <https://doi.org/10.1007/s11528-016-0045-4>
- Love, J., Selker, R., Marsman, M., Jamil, T., Dropmann, D., Verhagen, J., Ly, A., Gronau, Q. F., Šmíra, M., Epskamp, S., Matzke, D., Wild, A., Knight, P., Rouder, J. N., Morey, R. D., & Wagenmakers, E.-J. (2019). JASP: Graphical statistical software for common statistical designs. *Journal of Statistical Software*, 88(2), 1–17. <https://doi.org/10.18637/jss.v088.i02>
- Marzban, A., & Barati, Z. (2016). On the relationship between critical thinking ability, language learning strategies, and reading comprehension of male and female intermediate EFL university students. *Theory and Practice in Language Studies*, 6(6), 1241–1247 <https://doi.org/10.17507/tpls.0606.14>
- Mason, K. O. (2013). Teacher involvement in pre-service teacher education. *Teachers and Teaching*, 19(5), 559–574. <https://doi.org/10.1080/13540602.2013.827366>
- Maughan, B. (1995). Annotation: Long-term outcomes of developmental reading problems. *Journal of Child Psychology and Psychiatry*, 36(3), 357–371. <https://doi.org/10.1111/j.1469-7610.1995.tb01296.x>
- Moon, J., & Ke, F. (2020). Exploring the relationships among middle school students' peer interactions, task efficiency, and learning engagement in game-based learning. *Simulation & Gaming*, 51(3), 310–335. <https://doi.org/10.1177/1046878120907940>
- Mouratidis, A., Vansteenkiste, M., Michou, A., & Lens, W. (2013). Perceived structure and achievement goals as predictors of students' self-regulated learning and affect, and the mediating role of competence need satisfaction. *Learning and Individual Differences*, 23, 179–186. <https://doi.org/10.1016/j.lindif.2012.09.001>
- Norris, S. P. (2003). The meaning of critical thinking test performance: The effects of abilities and dispositions on scores. *Critical Thinking and Reasoning: Current Research, Theory and Practice*, 315–329.
- Norris, S. P., & Phillips, L. M. (1987). Explanations of reading comprehension: Schema theory and critical thinking theory. *Teachers College Record: The Voice of Scholarship in Education*, 89(2), 281–306. <https://doi.org/10.1177/016146818708900205>
- OECD. (2023). *PISA 2022 Assessment and Analytical Framework*.
- Pakmehr, H., Aghili, A., & Karami, M. (2015). Teaching strategies and developing critical thinking disposition: Intrinsic motivation, or group feedback? *International Journal of Educational and Psychological Researches*, 1(2), 135–138. <https://doi.org/10.4103/2395-2296.152228>
- Patall, E. A., & Zambrano, J. (2019). Facilitating student outcomes by supporting autonomy: Implications for practice and policy. *Policy Insights from the Behavioral and Brain Sciences*, 6(2), 115–122. <https://doi.org/10.1177/2372732219862572>
- Pituch, K. A., & Stevens, J. (2016). *Applied multivariate statistics for the social sciences: Analyses with SAS and IBM's SPSS*. Routledge.
- Pohan, C. A. (2003). Creating caring and democratic communities in our classrooms and schools. *Childhood Education*, 79(6), 369–373. <https://doi.org/10.1080/00094056.2003.10521237>
- Price, E., Ottati, V., Wilson, C., & Kim, S. (2015). Open-minded cognition. *Personality and Social Psychology Bulletin*, 41(11), 1488–1504. <https://doi.org/10.1177/0146167215600528>

- Quinn, S., Hogan, M., Dwyer, C., Finn, P., & Fogarty, E. (2020). Development and validation of the student-educator negotiated critical thinking dispositions scale. *Thinking Skills and Creativity*, 38, 1–17. <https://doi.org/10.1016/j.tsc.2020.100710>
- Riggs, W. (2010). Open-mindedness. *Metaphilosophy*, 41(1–2), 172–188. <https://doi.org/10.1111/j.1467-9973.2009.01625.x>
- Ruos, D., Em, S., Bamrungsin, P., & Khampirat, B. (2025). The impact of instructional behaviors on learning motivation via subjective task value in high school students in Cambodia. *Scientific Reports*, 15, Article 17344. <https://doi.org/10.1038/s41598-025-02147-z>
- Ryan, R. M., & Deci, E. L. (2020). Intrinsic and extrinsic motivation from a self-determination theory perspective: Definitions, theory, practices, and future directions. *Contemporary Educational Psychology*, 61, 1–11. <https://doi.org/10.1016/j.cedpsych.2020.101860>
- Sablić, M., Miroslavljević, A., & Škugor, A. (2021). Video-based learning (VBL): Past, present, and future: An overview of the research published from 2008 to 2019. *Technology, Knowledge and Learning*, 26(4), 1061–1077. <https://doi.org/10.1007/s10758-020-09455-5>
- Siegel, H. (1999). What (good) are thinking dispositions? *Educational Theory*, 49(2), 207–221. <https://doi.org/10.1111/j.1741-5446.1999.00207.x>
- Skinner, E. A., & Belmont, M. J. (1993). Motivation in the classroom: Reciprocal effects of teacher behavior and student engagement across the school year. *Journal of Educational Psychology*, 85(4), 571–581. <https://doi.org/10.1037/0022-0663.85.4.571>
- Sosu, E. M. (2013). The development and psychometric validation of a critical thinking disposition scale. *Thinking Skills and Creativity*, 9, 107–119. <https://doi.org/10.1016/j.tsc.2012.09.002>
- Tabachnick, B. G., & Fidell, L. S. (2014). *Using multivariate statistics* (6th ed.). Pearson.
- Taboada Barber, A., Buehl, M. M., Kidd, J. K., Sturtevant, E. G., Richey Nuland, L., & Beck, J. (2015). Reading engagement in social studies: Exploring the role of a social studies literacy intervention on reading comprehension, reading self-efficacy, and engagement in middle school students with different language backgrounds. *Reading Psychology*, 36(1), 31–85. <https://doi.org/10.1080/02702711.2013.815140>
- Tanaka, J. S. (1987). “How big is big enough?” Sample size and goodness of fit in structural equation models with latent variables. *Child Development*, 58(1), 134–146. <https://doi.org/10.2307/1130296>
- Thomas, C. L., & Hayes, A. R. (2021). Using exploratory structural equation modeling to investigate the construct validity of the critical thinking disposition scale. *Journal of Psychoeducational Assessment*, 39(5), 640–648. <https://doi.org/10.1177/0734282921990564>
- Van Tassel Baska, J., Quek, C., & Feng, A. X. (2006). The development and use of a structured teacher observation scale to assess differentiated best practice. *Roeper Review*, 29(2), 84–92. <https://doi.org/10.1080/02783190709554391>
- Walsh, C. M., Seldomridge, L. A., & Badros, K. K. (2007). California critical thinking disposition inventory: Further factor analytic examination. *Perceptual and Motor Skills*, 104(1), 141–151. <https://doi.org/10.2466/pms.104.1.141-151>
- Ward, M. (2018). *PISA for development: Results in focus* (No. 91). OECD Publishing.
- Williams, M. (2017). Skepticism. In J. Greco & E. Sosa (Eds.), *The Blackwell guide to epistemology* (pp. 33–69). Wiley. <https://doi.org/10.1002/9781405164863.ch1>

- Wilson, K. (2016). Critical reading, critical thinking: Delicate scaffolding in English for Academic Purposes (EAP). *Thinking Skills and Creativity*, 22, 256–265. <https://doi.org/10.1016/j.tsc.2016.10.002>
- Xu, Z., & Yang, F. (2024). Effect of critical thinking disposition on employee innovative behavior: A meta-theory of personality perspective. *Journal of Pacific Rim Psychology*, 18, 1–11. <https://doi.org/10.1177/18344909241231847>
- Zaneldin, E., Ahmed, W., & El-Ariss, B. (2019). Video-based e-learning for an undergraduate engineering course. *E-Learning and Digital Media*, 16(6), 475–496. <https://doi.org/10.1177/2042753019870938>
- Zhang, J., & Chen, B. (2021). The effect of cooperative learning on critical thinking of nursing students in clinical practicum: A quasi-experimental study. *Journal of Professional Nursing*, 37(1), 177–183. <https://doi.org/10.1016/j.profnurs.2020.05.008>

Appendix

Instructional behaviors	
Support and Feedback	Items
	Your teacher enabled students of different abilities to answer the questions.
	Your teacher offered to help you when you had (a) problem(s) with your homework or exercise.
	Your teacher praised you when you did well on your homework or exercise.
	Your teacher checked your homework.
	Your teacher checked if you had learned the material well before going on to new material.
	Your teacher gave you good feedback that helped improve your understanding.
	Your teacher gave you feedback on your homework or exercise.
Autonomy support	Items
	Your teacher decided with you who you would learn from or do group work with.
	Your teacher lets you choose between homework and an exercise that matches your interests.
	Your teacher accepted your suggestions on how to do homework or exercise that you sought.

Your teacher accepted your suggestions on who you prefer to do group work with.

**Video
lecture**

Items

You like viewing pre-class videos better than reading text materials

The videos were helpful because you could do them on your own time.

You think video lecture learning is easy to learn from the lesson.

The lessons were well-explained in the video lecture.

The video lecture helped complete the homework or exercise.

The video lectures were more helpful for completing the in-class activities.

**Cooperative
support**

Items

When you did group work, you discussed your ideas with other students in your group.

When you did group work, you tried to understand other students' ideas in your group.

When you did group work, you taught or helped other students in your group when they encountered problems at some point in the group work.

When you did group work, you got constructive feedback from other students in your group.

When you did group work, you collaborated with other students in your group to prepare the group work.

Critical thinking dispositions

**Critical
openness**

Items

You always think about the bigger picture during a discussion.

You always use new ideas to shape (modify) the way you do things.

You always seek for new ideas from different source (reading book, searching on internet, asking others, searching in library....)

You are always on the lookout for new ideas.

	You sometimes find a good argument that challenges some of your firmly held beliefs.
	It's important to understand other people's viewpoints.
	You think it is important to justify your understanding or the choices you make.
Reflective skepticism	Items
	You always re-evaluate your experiences.
	You always re-evaluate your experiences to learn from them.
	You always check the source of information, whether it is credible, before making judgments or believing.
	You always think about the wider implications of a decision before taking action.
	You often think about your actions to see whether you could improve them.

Students' perceptions of intrinsic and extrinsic motivation on academic performance: A survey study at a Cambodian provincial university

Chenda Phal¹, Sreylet On², Thavy Kheang³, Sreyroth Srim⁴

^{1, 2, 3, 4} National University of Cheasim Kamchaymear, Kampong Cham Campus, Cambodia

Article info

Article history

Received: February 19, 2025

Revised: April 10, 2025

Accepted: May 03, 2025

Keywords

Academic performance

Cambodia

Extrinsic motivation

Intrinsic motivation

Motivation

Article type

Research article

Abstract

One of the languages that has become widely used all over the world is English, and a great number of people from different countries use it as their primary language of communication. Further, it has been determined that the most important component that determines the outcomes of students' learning is the degree to which they are motivated to study English. Taking this into consideration, the current research conducted at a university in the province of Kampong Cham utilized a quantitative technique to determine the levels of motivation exhibited by students who were studying English as a foreign language. Twenty-two pupils filled out the questionnaire after receiving permission to do so from their respective school principals and English professors. As a consequence of this, the data suggest that the students who participated in the study were motivated to learn English more by their internal motivations than by external motivations. In addition, there are notable distinctions in the way male and female students perceive the same thing. To be more specific, the fact that students were driven to learn English by both intrinsic and extrinsic factors revealed that they are relatively motivated to perform so. On the other hand, because the survey study was carried out on a limited scale, it is recommended that future research make use of a bigger sample size as well as additional educational institutions located throughout Cambodia. In addition, qualitative and mixed-method designs are actively supported as alternative research approaches.

This is an open-access article under the [CC BY-SA](#) license.



Corresponding author

Chenda Phal

National University of Cheasim Kamchaymear, Kampong Cham Campus, Cambodia

Email: palchanda000@gmail.com

1. Introduction

At the beginning of this study, a brief collection of facts in English is presented, which focuses on the topic of motivation and, more specifically, the challenge of maintaining motivation while learning English. Moreover, the level of motivation that students have is a very important factor that affects their ability to comprehend what they read.

1.1. Research background

English is a global lingua franca, and many countries, including Canada, Australia, the United States of America, and the United Kingdom, use it as their official language. Moreover, it is also known as the language of worldwide communication, commerce, media, information, and

entertainment; therefore, learning English gives people opportunities in the global job market, access to information and entertainment, and exposure to a wide range of cultural variety (Wangdi, 2020). Furthermore, knowledge is power, and foreign language skills and cultural knowledge enable foreign language learners and speakers to respect and understand other cultures while also examining global challenges from multiple viewpoints. In addition, the English language is extremely important in today's society since it serves as a tool that facilitates exchanges and/or contacts in the contemporary world as a result of the openness in the commercial, cultural, scientific, political, and even tourism sectors (Moraes & Barros, 2020). Consequently, around 400 million people worldwide speak English natively, with another billion speaking it as a second language. Moreover, English is widely spoken throughout the world. Similarly, there are an estimated 800 million individuals who use English as a second language (ESL) or as the official language in around 20 different nations worldwide, and English is also a universal language (Zheng & Liu, 2018).

Meanwhile, Cambodian English language educators feel that the ASEAN Economic Community (AEC) opening has had an impact on English language use and instruction in Cambodia. As a result, English is quickly becoming a crucial ability for those in local and regional labor markets, as well as for Cambodian university students. Recognizing the significance of English in the AEC, the Ministry of Education, Youth and Sport (MoEYS) is launching programs to improve English language teaching in Cambodian public schools (Stroupe & Kimura, 2015). More importantly, one of the most important factors in the learning process is motivation. Without motivation, it is difficult to accomplish the goals of learning. Therefore, when it is included in the learning process, students will comprehend the materials, especially the English language, more fully. Consequently, this study aims to determine how students are motivated to learn English (Purmama et al., 2019).

Moreover, language learning attitude and motivation are important abstract emotional variables in language acquisition. Considerable research has shown that attitude and motivation to learn another language are connected. Specifically, learners who are motivated to learn a second or third language and have a positive attitude toward it are more likely to succeed (Ardeo, 2016). For instance, students may want to study a foreign language for practical reasons, such as finding work, or they may want to become more like native speakers, or at the very least, communicate with them or visit their countries. Furthermore, the impact of initial motivation and attitudes on language acquisition performance is well understood. That is, if people have a favorable attitude about persons who use the language, they will be more successful and driven to learn it (Syukur, 2016).

1.2. Statement of the problems

Cambodian students are anxious. Consequently, this shyness may be one of the reasons why teachers believe they do not understand their students and that they require professional development (Igawa, 2008). Moreover, there were various difficulties that teachers and students had while teaching and learning English. Specifically, the main barriers were found to be the characteristics of the teachers, study plans, learning and teaching materials, classroom activities, class size, and students' attitude toward independent learning. In addition, the absence of textbooks, a language lab, and buildings at the school, according to school principals, hinders the process of teaching and studying English (Em, 2022).

Furthermore, students were asked to rate their agreement with a statement regarding the issues they experienced in class on a Likert scale. As a result, the findings suggest that many pupils were frightened when asked to speak in English class. When asked why they get nervous in

English classes, students reported: “I run out of words when the teacher asks me to answer in English,” “I don't know how to pronounce English words correctly,” “I'm afraid other students will laugh at me,” and “I don't understand the lesson.” Consequently, students’ anxiety levels may contribute to their “fear” of studying English in school (Mat & Yunus, 2014).

Moreover, students may feel obligated to learn, which lowers their motivation levels. As a result, people study English without making a significant commitment. Additionally, the availability of facilities for instruction and learning could be another factor. For instance, students may lose interest in learning if they want to improve their listening comprehension in English but are unable to access study resources. Likewise, a lack of resources, including qualified English teachers, is another reason. In this environment, students could get disinterested in the methods English professors use to instruct them or in the tiresome materials the lecturers provide (Riyanti, 2019).

Similarly, some students lack the motivation to learn English. They thought English was tough and did not enjoy the class. Consequently, they exhibited bad attitudes toward learning English. Furthermore, several students were dissatisfied with their English since, despite years of study, they were still unable to communicate effectively. Even though several university students claimed to have learned English since elementary school, they nevertheless struggled to communicate in English (Jefiza, 2017).

Ultimately, motivation is one of the most important factors in learning a second language successfully. Indeed, the acquisition of a language requires motivation, as learning a language is impossible without it. Therefore, learners who lack desire may not achieve their goals in comparison to motivated students (Noreen et al., 2015).

1.3. Research objectives

There are three objectives of this study as follows.

1. To examine the levels of intrinsic motivation on students’ academic performance.
2. To investigate the levels of extrinsic motivation on students’ academic performance.
3. To investigate if there is a significant difference in perception between male and female students.

2. Literature review

This section provides a comprehensive review of the related literature concerning motivation and English language learning and teaching in various contexts.

2.1. Motivation

Motivation is a key personality trait that drives individuals to perform specific tasks to achieve their goals. It acts as an internal force that persuades or inspires both oneself and others to take action (Hendri et al., 2020). Moreover, motivation plays a crucial role in breaking barriers to change and fostering high performance (Tohidi & Jabbari, 2012). In the field of education, motivation significantly influences student success, particularly in learning a second language (Purmama et al., 2019). Furthermore, research indicates a strong correlation between motivation and academic achievement across all education levels (Rehman et al., 2014). However, motivation tends to decline with age, impacting students’ willingness to teach

(Yeung et al., 2011). Despite this, not all students are equally motivated, as seen in Indonesian schools where many students find English challenging and lack enthusiasm (Riyanti, 2019).

In addition to education, motivation is also crucial in the workplace, influencing employee performance and organizational success. Specifically, positive motivation enhances productivity, whereas negative motivation hinders it (Islam, 1999). It is shaped by both conscious and unconscious influences and is vital in fields requiring sustained effort, such as sports, medicine, and music (Vincent & Kumar, 2019). Similarly, in language learning, motivation determines engagement, choice, and persistence in mastering a foreign language (Pathan et al., 2010). Ultimately, a high level of motivation helps students remain focused and achieve better learning outcomes (Lestari, 2020).

2.1.1. Intrinsic motivation

Intrinsic motivation is the internal drive that compels individuals to engage in activities for personal satisfaction rather than external rewards. In the educational context, teachers and students who are intrinsically motivated find fulfillment in learning and teaching due to personal interests, enjoyment, or the desire to achieve self-set goals (Aquilina, 2023). For instance, a student learning English to communicate socially or studying mathematics to avoid being deceived in transactions exhibits intrinsic motivation (Filgona et al., 2020). Moreover, enjoyment plays a crucial role in learning, as students who do not find pleasure in a subject may struggle to absorb information. Likewise, intrinsically motivated teachers are passionate about learning and experimenting with new ideas, finding joy in their profession (Aquilina, 2023). This form of motivation arises from an individual's interests rather than external pressures (Tohidi & Jabbari, 2012). As a result, it fosters engagement in academic activities for the love of learning, mastery, and intellectual growth rather than for tangible rewards (Ryan & Deci, 2000). Nevertheless, while intrinsic motivation enhances learning experiences, it does not necessarily guarantee expertise in a subject; rather, it is driven by enjoyment and personal satisfaction (Locke & Schattke, 2019). Ultimately, individuals motivated intrinsically engage in activities due to their perceived worth and satisfaction gained from the process (Ardeo, 2016).

2.1.2. Extrinsic motivation

Extrinsic motivation refers to the drive to engage in activities due to external incentives such as rewards, recognition, or pressure rather than personal enjoyment. In educational settings, it typically manifests through pay raises, social acknowledgment, and academic rewards. However, while extrinsic motivation can influence behavior, its long-term effects on engagement and satisfaction may be limited (Aquilina, 2023). It is often driven by factors like financial gain, passing exams, or career advancement. In contrast to intrinsic motivation, which arises from personal fulfillment, extrinsic motivation is triggered by external stimuli (Filgona et al., 2020). Moreover, money, as a motivator, is valued for its significance rather than its material presence, and its meaning varies among individuals, affecting their psychological well-being (Locke & Schattke, 2019). In addition, competition, rewards, and external pressures serve as common extrinsic motivators, encouraging individuals to meet external expectations rather than engaging in activities for their inherent satisfaction (Ardeo, 2016). Typical examples include grades, trophies, social approval, and the fear of punishment (Tohidi & Jabbari, 2012).

2.2. Intrinsic factors affect performance

Intrinsic variables significantly influence students' academic achievement, especially in the realm of learning English as a second language. Internal factors, including attitudes, enjoyment, self-confidence, and anxiety, affect learners' engagement with the topic, participation in classroom activities, and reactions to instructional tactics. Comprehending these psychological and emotional aspects is crucial for educators seeking to provide effective, helpful, and motivating learning environments.

2.2.1. Positive attitudes

The article discusses the critical role of attitude in learning English as a foreign language (EFL). A positive attitude significantly enhances students' motivation, engagement, and overall success in language acquisition (Khan, 2016). Furthermore, active classroom participation fosters material comprehension, communication skills, and critical thinking (Rai, 2022). In addition, attitude influences behaviors such as reading English books, watching English media, and listening to English radio, directly affecting academic success (Ahmed et al., 2021). A student's attitude towards English also impacts their willingness to learn. Specifically, a negative attitude can hinder comprehension despite teachers' efforts, whereas a positive attitude facilitates easier language acquisition (Ganapathy & Ying, 2016). Moreover, a strong desire to learn encourages persistence despite challenges (Syukur, 2016). Motivation—both instrumental (career-related) and integrative (cross-cultural communication)—drives language teaching (Mouili et al., 2014). Attitudes, whether positive or negative, influence participation and engagement in the classroom (Delić, 2020). Consequently, low participation due to a lack of motivation can affect academic performance (Zulfikar et al., 2019). Since attitudes shape learning outcomes, they play a crucial role in determining language proficiency alongside intellectual ability (Kazemi Malekmahmudi & Kazemi Malekmahmudi, 2018). Ultimately, students generally recognize the value of English for academic and professional success, influencing their motivation to learn (Getie, 2020).

2.2.2. The enjoyment of learning

Students who reported the highest satisfaction with their learning experience were also more likely to believe that their team worked efficiently and that the learning environment suited them well. Moreover, information sharing played a crucial role in mediating students' satisfaction, team performance, and perceived individual learning (Yu Lin et al., 2020). Enjoying a foreign language is a complex emotion that represents an emerging area of SLA research (Em & Khampirat, 2024). From this perspective, viewing language acquisition through the lens of enjoyment may explain why some students find learning enjoyable and successful, while others experience it as stressful. In particular, engaging classroom activities, such as singing, can enhance students' interest and motivation by making learning more relatable and emotionally engaging (Passiatore et al., 2019). Therefore, teachers should implement creative and interactive teaching strategies to address students' lack of enthusiasm and concentration, ensuring that learning remains enjoyable (Ghafar, 2024). Since instructors play a central role in selecting activities and resources, they should ensure that learning is both engaging and effective. Ultimately, a positive learning experience is built on key factors such as skilled educators, student engagement with the material, active participation, and goal-oriented learning. Thus, fun and education are deeply interconnected, making creativity an essential component of the learning process (Seemiller et al., 2021).

2.2.3. Self-confidence

Self-confidence plays a crucial role in students' learning and overall personal development. It enables individuals to maintain a positive attitude, set and achieve goals, and effectively navigate challenges (Akbari & Sahibzada, 2020). However, confidence levels can vary across different aspects of life. In particular, a lack of self-confidence can hinder foreign language learning and contribute to psychological issues such as anxiety, fear, and antisocial behavior. Students with low self-esteem often develop negative attitudes toward learning, experience persistent anxiety, and hesitate to participate in class activities (Tuncel, 2015). Self-confidence is the ability to trust in one's skills, take responsibility, and work towards future goals. Moreover, it allows individuals to approach challenges with courage, think independently, and acknowledge mistakes (Sihotang et al., 2017). Although this essential quality can evolve, it may also decline, affecting a person's ability to take action. Nevertheless, confidence enables individuals to engage with others positively, take initiative, and perform tasks without excessive anxiety. A supportive family environment in childhood fosters self-confidence, which, in turn, enhances students' ability to achieve learning objectives. Finally, setting clear learning goals helps students process and absorb material effectively, making the learning process smoother (Oktafiani, 2021; Anwar, 2016).

2.2.4. Anxiety

Language anxiety is a psychological condition that arises when individuals experience excessive worry, fear, or unease, particularly in language learning contexts. Specifically, anxiety can be categorized into two types: trait anxiety, which is a stable personality characteristic, and state anxiety, which is a temporary reaction to specific stressors (Sari & Ningsih, 2023). Language anxiety is a significant challenge for students learning a foreign language, such as English, and it can negatively impact their learning and academic performance. It often manifests as feelings of nervousness, tension, and uncertainty when using or learning a second language (Gopang et al., 2015). In many cases, students—especially in Indonesia—struggle with English proficiency despite years of instruction. This ongoing struggle can be attributed to language anxiety, which hinders effective communication and reduces motivation to engage in learning (Naibaho, 2022). Therefore, teachers play a crucial role in addressing students' anxiety, as it significantly affects their speaking abilities and overall language acquisition (Amiruddin & Suparti, 2018). When students feel anxious about speaking English, particularly with their teachers, they may perceive it as a threat, further reinforcing their reluctance to communicate (Tran, 2022). Furthermore, language anxiety activates the autonomic nervous system, leading to stress and nervousness that obstruct learning (Sari & Ningsih, 2022). It is one of the primary psychological barriers to fluency, affecting students' confidence and willingness to participate in class (Hidayati, 2018). As a result, high levels of linguistic anxiety can lower students' enthusiasm for learning, negatively influencing their academic performance and engagement in class activities (Weda & Sakti, 2018). Therefore, understanding the factors contributing to language anxiety is essential for improving teaching strategies and creating a more supportive learning environment.

2.3. Extrinsic factors' effect on performance

Intrinsic drive and personal attributes strongly impact student learning, whereas extrinsic factors also critically influence academic performance. Factors include the classroom environment, parental involvement, instructor attitudes, and peer interactions that influence children's engagement with their studies and the development of language competency. External forces frequently interact with internal characteristics, either bolstering or diminishing

pupils' efforts and motivation. Comprehending these elements is crucial for establishing conducive learning environments that promote academic achievement and comprehensive student growth.

2.3.1. External factors

External influences significantly impact students' learning challenges, particularly in school settings where various factors shape their educational experiences. Classroom dynamics, including teacher-student interactions, curriculum implementation, and teaching methodologies, play a crucial role (Wulandari et al., 2020). Additionally, resource management, such as effort, environment, and help-seeking, affects learning outcomes (Safian et al., 2023). Environmental factors like home language exposure, parental proficiency, and socioeconomic status also influence second language acquisition (Mirhadizadeh, 2016). Moreover, external incentives and teacher motivation contribute to students' success in learning a second language (Ahmad et al., 2023).

2.3.2. Parental

Parental involvement plays a crucial role in students' academic success and motivation to learn. Parents' attentiveness and engagement positively influence children's educational progress by fostering motivation, providing necessary resources, and creating a supportive learning environment (Purwanto et al., 2023; Lestari, 2020). Various factors, including social class, financial status, and linguistic background, also impact parental attitudes and involvement in education (Hosseinpour et al., 2015). Active parental participation in both school and home settings significantly contributes to children's learning and overall development (Menheere & Hooge, 2010; Wangdi & Jigyel, 2021). Parental influence extends to language learning, as children benefit from language exposure and interaction at home, shaping their motivation and proficiency (Sumanti & Muljani, 2021; Arshad et al., 2012). Parents with higher education levels tend to have greater expectations for their children's academic achievements, using their background to assist in schoolwork and communicate with teachers (Lee & Chou, 2014; Haditama et al., 2018). Additionally, effective parenting styles and positive attitudes are linked to students' academic success (Kordi & Baharudin, 2010). Parental involvement, particularly through home monitoring and academic expectations, has a strong positive correlation with student performance, with overall academic achievement being more influenced than subject-specific performance (Fan & Chen, 2001). Encouraging parental engagement remains a key factor in fostering long-term educational success (Rintaningrum et al., 2022).

2.3.3. Teacher's attitudes

Teachers play a crucial role in enhancing student motivation and learning outcomes, especially in English classes. A supportive environment fosters student confidence, engagement, and self-direction (Hsu, 2010). Teacher motivation influences student academic progress by encouraging participation in solo and group projects, leading to better performance and self-image (Oko, 2014). Motivation significantly impacts group learning and conceptual retention. Parental support also plays a key role in language learning (Seda & Kulmetov, 2016). Despite effective teaching strategies, maintaining student motivation remains a challenge (Hsu, 2010). Teachers' instructional methods, feedback, and expectations greatly influence student interest and success (Tuan, 2012; Bertha Garrett, 1985). Highly motivated teachers enhance academic achievement (Engin, 2020). Identifying engaging classroom activities is essential for fostering motivation (Mirhadizadeh, 2016). Teacher behavior extends beyond the classroom, inspiring students (Mahmoud & Mahmoudi, 2015). Continuous professional development improves

instruction and student outcomes (Akiba & Liang, 2016). Teacher affirmation strengthens student engagement (Goodboy & Myers, 2008). Expectations influence student performance, often becoming self-fulfilling prophecies (Muijs et al., 2014). Teachers also face psychological, social, and financial challenges while being accountable to students and parents (Al Said et al., 2022).

2.3.4. Students' peers

Friendship plays a crucial role in shaping students' attitudes toward language learning, making them more engaged and motivated to study (Tuan, 2012). Prior learning experiences also influence current academic outcomes, with past success leading to improved performance (Barron, 2003). A key but often overlooked relational aspect in learning is personal relationships, particularly friendships, which foster collaborative rather than competitive learning environments (Wulanningtyas & Fauzan, 2022). Peer support can significantly enhance language acquisition, as friends who encourage one another and provide language exposure contribute to skill improvement (Al-dalawi et al., 2023). Additionally, friendships strengthen students' motivation, self-belief, and ability to overcome academic challenges, ultimately improving their performance (Shanti et al., 2021). The concept of a “critical friend” refers to a trusted individual who offers constructive feedback, poses insightful questions, and provides a fresh perspective to enhance learning. This role involves critical description, active listening, and thoughtful feedback, categorized as “Cool” (detached and inquisitive), “Hard” (challenging and analytical), and “Warm” (supportive and encouraging) (Baskerville & Goldblatt, 2009; Ahmadpour & Ahmadpour, 2017).

2.4. Environmental factors

The classroom environment significantly impacts student motivation and learning. Poor physical conditions, such as inadequate lighting or overcrowding, can hinder motivation, while well-organized, well-lit, and resourceful classrooms enhance learning (Tuan, 2012). Additionally, the social atmosphere of the classroom influences students' attitudes toward peers, teachers, and education. Since students spend a significant amount of time in this space, it shapes their experiences with cooperation, competition, and social interactions, preparing them for future challenges (Hugerat, 2016).

2.5. GPA factors

GPA is a key indicator of student success in higher education, influenced by both internal factors (within the student) and external factors (environmental influences) (Hendri et al., 2020). Despite being widely used to assess academic achievement, GPA alone does not fully represent a student's performance. Other factors, such as communication skills, use of school facilities, and family stress, also impact student success (Sarmita, 2018). The Cumulative GPA (CGPA) is often used to evaluate overall academic performance, though some studies rely on GPA as a measure of ability (Abu Hasan et al., 2017). GPA remains a highly reliable metric in educational research for predicting academic performance (Meepradit et al., 2022).

3. Methodology

This section delineates the research design and methodology utilized in the study to investigate the influence of intrinsic and extrinsic motivational factors on students' academic success in English language learning. The research employs a quantitative methodology utilizing a survey design to gather and analyze data from students at the National University of Cheasim

Kamchaymear (NUCK). Comprehensive accounts of the population, sampling methodologies, data acquisition processes, research tools, and ethical considerations are presented. The article further delineates the measures implemented to guarantee the validity and reliability of the instruments and outlines the methodologies employed for data analysis.

3.1. Research design

The study used a quantitative approach. Different kinds of quantitative designs exist. Survey design, informal comparative design, correlational design, and experimental design are some of these types. A survey design was used in this investigation.

3.2. Population and sampling techniques

The survey was completed by using random probability. The technique to conduct this research is simple random sampling. The 152 students from the National University of Cheasim Kamchaymear were randomly assigned to complete the questionnaire. These students were between the ages of 17 and 25. It was determined to approve this research. Each intended participant consented to our research. Then the data collection process was completed.

3.3. Data collection procedure

Students from the National University of Cheasim Kamchaymear were given the questionnaire. A sample of 152 students was selected to partake in the research. They offered to take part after hearing about the goals of the study and research ethics from the first author. The study's ethical concerns, to put it briefly, followed the four standards of ethics: (1) protecting participants from injury, (2) getting their consent, (3) maintaining participant privacy, and (4) avoiding disappointment.

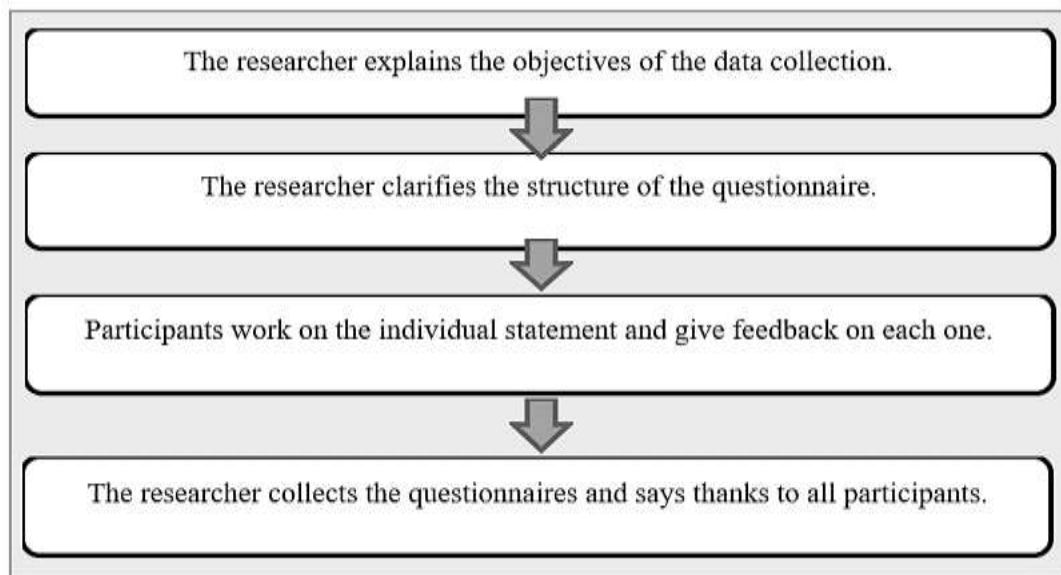


Figure 3.1. Data collection procedures

To obtain data from the National University of Cheasim Kamchaymear located in Cambodia, the researcher requests permission from the principal. Before beginning data collection, invitations to participate in the study were extended to the chosen participants through a letter to the principals of the NUCK. Before completing the questionnaires to obtain accurate and

trustworthy data, the respondents were provided pertinent instructions and given the assurance of anonymity. The contributors were ethically told that the surveys were only a survey and not a test or quiz.

3.4. Research instruments

The questionnaire used in this study contained three sections. The first section was about demographic information such as students' names, gender, and age range. The second section aimed to examine the levels of intrinsic motivation on students' academic performance. It consisted of 8 items. The third section contained an optional comment space in which students could write their suggestions on how to investigate the levels of extrinsic motivation on students' academic performance. It consisted of 8 items (Em et al., 2022). The fourth section aimed to investigate if there is a significant difference in perception between male and female students. It consisted of 8 items. Participants were asked to circle or tick one of the five supplied options for each sentence (1 = strongly agree, 2 = agree, 3 = neutral, 4 = strongly disagree, and 5 = disagree) on a Likert scale with five possible responses. Thus, reliability was confirmed by utilizing the five-point Likert scale. It took about 30 minutes to complete the questionnaire, and all 200 students completed the questionnaire. There were only 200 students who responded to the four sections and offered their suggestions in the comment space.

3.5. Validity and reliability

Validity is an absolute necessity for quantitative research. Since an invalid test or instrument is useless, validity is crucial for a useful analysis. An instrument's ability to calculate is a measure of its quality. Reliability of data and results is crucial in any research process. Replicability, accuracy, stability, and trustworthiness all contribute to the analysis's dependability. This reliability suggests that the analysis would produce the same outcomes if it could witness the same thing twice or more.

Table 1. Reliability of the indicators according to Cronbach's alpha analysis

Constructs	No. of Statements	Cronbach's alpha
Intrinsic	8	0.81
Extrinsic	8	0.80
Academic performance	8	0.84

Table 1 presents the reliability of three different constructs: Intrinsic motivation, Extrinsic motivation, and Academic performance, based on their respective number of statements and Cronbach's alpha coefficient values. The reliability analysis is conducted to assess the internal consistency of the items within each construct, indicating how closely related the set of statements is as a group.

Intrinsic motivation: This construct is measured by 8 statements, and the Cronbach's alpha value is 0.81. This indicates a good level of internal consistency, suggesting that the statements are sufficiently related and can reliably measure the concept of "Opportunities."

Extrinsic motivation: This construct also consists of 8 statements, with a Cronbach's alpha of 0.80, which indicates a high level of internal consistency. A value above 0.80 is generally considered excellent, suggesting that the items measuring "Challenges" are highly reliable.

Academic performance: The third construct, "Ethics," is represented by 8 statements as well. Its Cronbach's alpha value is 0.84, indicating acceptable internal consistency. While this value is lower compared to the other two constructs, it still falls within the generally accepted threshold for reliability (0.70 or above).

In summary, all three constructs, intrinsic motivation, Extrinsic motivation, and Academic performance, demonstrate reliable internal consistency according to Cronbach's alpha, making the measurement tool valid for further statistical analysis. The values suggest that the constructs are suitable for research and can provide trustworthy data.

Table 2. Selection of the Alpha Coefficient

Cronbach's alpha	Internal Consistency
$\alpha \geq 0.9$	Excellent
$0.9 > \alpha \geq 0.8$	Good
$0.8 > \alpha \geq 0.7$	Acceptable
$0.7 > \alpha \geq 0.6$	Questionable
$0.6 > \alpha \geq 0.5$	Poor
$0.5 > \alpha$	Unacceptable

Source: Adapted from Siswaningsih et al. (2017).

The table displays the ranges of Cronbach's alpha values and the corresponding degrees of internal consistency. The table classifies values between 0.8 and 0.9 as good, and an alpha of 0.9 or higher is considered outstanding. Values between 0.6 and 0.7 are considered problematic, whereas an alpha between 0.7 and 0.8 is considered acceptable. The researcher views any Cronbach's alpha value below 0.5 as unsatisfactory and considers any value between 0.5 and 0.6 as bad. This categorization system assists researchers in assessing the reliability of their measurement tools, ensuring a sufficient evaluation of the internal consistency of the items.

3.6. Data analysis

The quantitative data from the current study were analyzed using the Statistical Package for the Social Sciences (SPSS) version 26. Following that, all of the extrinsic motivation items were computed and examined with a focus on M and SD, and all of the intrinsic motivation items underwent the same procedures. To determine the degree of students' motivation to study English, the total extrinsic and intrinsic motives were also summed. At every level of the analysis, minimum (Min) and maximum (Max) values were also taken into account; however,

the results did not include them. Additionally, an overall motivation was calculated using all of the components from both motivations. Every element's frequency and percentage were calculated and statistically examined. Descriptive statistics were used to check the significant distribution of the answers for items on a 5-point Likert scale. Mean (M) and Standard Deviation (SD) were generated to identify significant differences in students' motivation.

3.7. Ethical consideration

This ethical perspective comes from the Institute of Foreign Languages at the National University of Cheasim Kamchaymear. The official letters were issued by the Institute of Foreign Languages at the NUCK. If an educational researcher is unfamiliar with ethics and academic honesty, ethical considerations in research may appear like a pipe dream (Khan, 2016). Ethical conduct in research projects builds public trust, supports research objectives, values collaboration, holds researchers accountable, and protects participants. It also promotes truth, new information, respect, trust, fairness, and accountability in research collaborations (Mcgregor, 2023). Their rights fall into four categories, and the researcher is responsible for protecting them: Consider the following factors: (a) the right to privacy; (b) the assurance of anonymity; (c) the assurance of secrecy; (d) the avoidance of injury, treachery, or deception; and (e) having in mind the rights of participants (Govil, 2013). Obtain participants' consent by informing them about the use of their data and what will happen to case materials, photos, audio, and video recordings (Gajjar, 2013). As plagiarism is rightly thought to diminish or even completely obliterate the genuine value of a scholarly work, it is considered a form of academic dishonesty (Khan, 2016). According to Gajjar (2013), ensuring the confidentiality and privacy of persons is a fundamental aspect of psychological practice. Nonetheless, a large number of privacy issues are unique to the research population. According to experts, researchers ought to devise methods that inquire about participants' willingness to discuss challenging subjects without putting them in uncomfortable circumstances. That might mean that they ask a series of more in-depth interview questions and give participants the option to end the session at any time if they feel uncomfortable. And since research participants can choose how much information about themselves to disclose and under what conditions.

4. Finding and discussion

This section presents the findings of the research conducted to find out the factors of motivation. Following the methodology outlined in previous section, data were collected through surveys, interviews, and experiments, and analyzed using a questionnaire. The results are organized into sections, providing a comprehensive overview of the key insights obtained from the data.

4.1. Demographic findings

Table 3. Demographic Information of the Samples (n = 152)

Variables	Values	N	Percentages
Sex	Male	51	33.55
	Female	101	66.44
Age	19-25	118	77.63

Years	26-30	34	22.37
	Year 1	21	13.81
	Year 2	51	33.55
	Year 3	41	26.97
	Year 4	39	25.67

Table 3 provides demographic data that reveals significant trends among the participants. A striking majority are female (66.44%), suggesting potential gender imbalances in the population being studied. The age distribution indicates that a substantial portion (77.63%) falls within the 19-25 age range, which may reflect the typical age of students in higher education, while the absence of participants aged 26-30 indicates a potential gap in that demographic. In terms of academic performance, the data shows a fairly even distribution across the four years, with Year 4 students making up 33.55% and Year 1 students at 13.81%. This could suggest a retention of students as they progress, though further investigation would be needed to understand the factors influencing student persistence and performance.

4.2. Intrinsic motivation

Table 4. Descriptive statistics of intrinsic motivation

Statements	Min	Max	M	SD
1. English is essential for my personal development.	1.00	2.00	1.39	0.49
2. I watch films, listen to songs, or read in English.	1.00	4.00	1.66	0.61
3. Knowing English gives me a feeling of success.	1.00	5.00	1.73	0.60
4. I usually learn English by myself at home	1.00	5.00	1.91	0.78
5. I study English because I like it	1.00	5.00	1.76	0.94
6. Learning English is easy	1.00	5.00	3.08	1.53
7. I want to learn English.	1.00	4.00	1.62	0.58
8. I usually use English outside the class.	1.00	5.00	2.63	1.45
Over intrinsic motivation	1.00	3.50	1.97	0.63

The table presents the responses of 152 participants to various statements regarding their motivation to learn English. The data show that, overall, participants exhibit a moderate level of intrinsic motivation, with a mean score of 1.97. The statement “English is essential for my personal development” had the lowest mean score of 1.39, indicating strong agreement, while “Learning English is easy” had the highest mean score of 3.08, reflecting more mixed perceptions. The participants expressed a general interest in English, as evidenced by means for statements like “I want to learn English” M = 1.62 and “I study English because I like it”

M = 1.76. However, they perceived learning English as somewhat challenging, as indicated by the relatively higher mean for the ease of learning English, M = 3.08. These findings suggest that while participants see English as important for personal development and success, there are mixed feelings regarding the ease of learning the language, with some challenges in applying English outside the classroom.

4.3. Extrinsic motivation

Table 5. Descriptive Statistics of extrinsic motivation

Statements	Min	Max	M	SD
1. Knowing English will be helpful for my career.	1.00	4.00	1.36	0.52
2. I need to know English to enter university.	1.00	5.00	2.18	1.26
3. English will broaden my future options.	1.00	4.00	1.74	0.48
4. English will help when I travel overseas.	1.00	5.00	1.65	0.68
5. I learn English to communicate with others.	1.00	5.00	2.05	1.12
6. English will help me when I meet foreigners.	1.00	5.00	1.72	0.95
7. My Parents allow me to study English.	1.00	2.00	1.59	0.49
8. My friend encourages me to learn English.	1.00	5.00	2.15	1.00
Overall extrinsic motivation	1.00	3.13	1.81	0.56

The findings reveal that extrinsic motivation strongly influences students' drive to learn English, with career prospects being the most significant factor (M = 1.36), suggesting that students view English proficiency as essential for employability in an increasingly globalized economy. Additionally, students recognize its importance for broadening future opportunities (M = 1.74) and facilitating international travel (M = 1.65), reinforcing English as a global lingua franca. While the necessity of English for university admission (M = 2.18) is acknowledged, it appears to be a less compelling motivator than career-related reasons, possibly reflecting the flexibility of English requirements in Cambodian higher education. Social influences also play a role, with parental support (M = 1.59) being more pronounced than peer encouragement (M = 2.15), suggesting that while family plays a vital role in motivating students, the impact of friends varies depending on social circles. The relatively higher mean for "I learn English to communicate with others" (M = 2.05) highlights the functional aspect of English in interpersonal and intercultural interactions. Overall, these results emphasize that students primarily perceive English as a tool for professional success

and international engagement, with social and academic motivations playing a secondary role, suggesting that language learning strategies should align with career-oriented goals while also fostering broader engagement with English in academic and social contexts.

4.4. Descriptive statistics of academic performance

Table 6. Academic performance

Statements	Min	Max	M	SD
1. I made myself ready in all my subjects.	1.00	5.00	2.08	0.96
2. I pay attention and listen during every discussion.	1.00	3.00	1.82	0.50
3. I want to get good grades in every subject.	1.00	5.00	2.34	1.33
4. I actively participate in every discussion.	1.00	5.00	1.90	0.69
5. I start doing papers and projects as soon as they are assigned.	1.00	5.00	2.30	1.14
6. I enjoy homework and activities because they help me improve my skills in every subject.	1.00	5.00	1.96	0.96
7. I exert more effort when I do difficult assignments.	1.00	3.00	1.78	0.59
8. Solving problems is a useful hobby for me.	1.00	5.00	2.13	0.90
Overall Academic Performance	1.00	3.00	2.04	0.64

The findings suggest that students demonstrate a moderate level of academic engagement, with an overall academic performance mean score of ($M = 2.04$). The highest agreement is observed in statements related to attentiveness during discussions ($M = 1.82$) and effort in completing difficult assignments ($M = 1.78$), indicating that students recognize the importance of focus and perseverance in their studies. However, while students express a desire to achieve good grades ($M = 2.34$) and complete assignments promptly ($M = 2.30$), the relatively higher mean scores suggest variability in their commitment to proactive study habits. Participation in discussions ($M = 1.90$) and enjoyment of academic tasks ($M = 1.96$) also show positive engagement, though not universally strong. The statement “Solving problems is a useful hobby for me” ($M = 2.13$) reflects a mixed perception, implying that while some students see problem-solving as valuable, others may not find it intrinsically motivating. These findings indicate that while students exhibit positive academic behaviors, their motivation and consistency in study habits vary, highlighting the need for strategies that reinforce self-discipline, engagement, and intrinsic motivation in learning.

Table 7. Group statistics

Variables	Sex	N	M	SD	SD. E
Intrinsic motivation	Male	51	2.12	0.56	0.07

Extrinsic motivation	Female	101	1.90	0.65	0.06
	Male	51	1.98	0.45	0.06
	Female	101	1.72	0.60	0.05

The statistical data comparing male and female participants' extrinsic and intrinsic motivation is displayed in the table. In terms of intrinsic motivation, men ($n = 51$) have a mean score of ($M = 2.12$), which is higher than females ($n = 101$), whose mean is ($M = 1.90$). This suggests that men have a stronger internal drive. The males' SD is 0.56, which indicates moderate

Variability: Females' SD is 0.651, which indicates slightly higher variability. Males again score higher than females in terms of extrinsic motivation, with a mean of ($M = 1.98$ versus $M = 1.72$), indicating a stronger dependence on outside stimuli. Males have a smaller extrinsic motivation ($SD = 0.45$) than females do ($SD = 0.6$), which may indicate that male responses are less variable. Overall, the data shows that there are gender disparities in the sorts of motives, with men scoring higher for both extrinsic and intrinsic incentives.

Table 8. Independent samples test

Variables		Levene's Test for Equality of Variances		t-test for Equality of Means						
		F	Sig.	T	df	Sig. (2-tailed)	Mean Difference	Std. Error Difference	95% Confidence Interval of the Difference	
									Lower	Upper
Intrinsic motivation	Equal variances assumed	1.312	.254	2.110	150	0.03	0.22	0.10	0.01	0.43
	Equal variances not assumed			2.206	113.268	0.02	0.22	0.10	0.02	0.42
Extrinsic motivation	Equal variances assumed	7.437	.007	2.727	150	0.00	0.26	0.09	0.07	0.44
	Equal variances not assumed			2.988	127.929	0.00	0.26	0.08	0.08	0.43

The results of an independent samples t-test analyzing intrinsic and extrinsic motivation between two groups are displayed in Table 8. Levene's Test for Equality of Variances confirms that the assumption of equal variances is satisfied for intrinsic motivation ($F = 1.31$, $\text{Sig.} = 0.25$). The t-test, assuming equal variances, indicates a statistically significant difference between the groups ($t = 2.11$, $df = 150$, $\text{Sig. (2-tailed)} = 0.03$), with a mean difference of 0.22 and a 95% confidence interval from 0.01 to 0.43. When identical variances are not assumed,

the result remains significant ($t = 2.20$, $df = 113.268$, $Sig. = 0.02$), affirming the discovery's robustness.

Levene's Test indicates a breach of the equal variance assumption for extrinsic motivation ($F = 7.43$, $Sig. = 0.00$). Consequently, the results from the t-test that does not assume equal variances are more suitable. The test indicates a statistically significant difference ($t = 2.98$, $df = 127.929$, $Sig. = 0.00$), with a mean difference of 0.26 and a 95% confidence interval from 0.08 to 0.43. Despite the t-test assuming equal variances indicating a significant difference ($t = 2.72$, $df = 150$, $Sig. = 0.00$), the breach of variance equality necessitates prudence.

Overall, these data demonstrate statistically significant variations in intrinsic and extrinsic motivation between the two groups.

5. Conclusion and future direction

Motivation is a key factor in achieving goals, particularly in learning a second language. It influences effort and performance, especially in English studies. Motivation can be intrinsic (driven by personal satisfaction and self-fulfillment) or extrinsic (driven by external rewards or pressures like praise, money, or recognition). While intrinsic motivation fosters enjoyment and personal growth, extrinsic motivation can influence behavior through external benefits. A study conducted at the National University of Cheasim Kamchaymear found that students had low levels of both intrinsic and extrinsic motivation, negatively affecting their academic performance (Pathan et al., 2010; Lestari, 2020; Aquilina, 2023). Intrinsic motivation, driven by a personal interest in learning, leads to better academic performance and deeper understanding, especially in English studies. Extrinsic motivation, focused on external rewards like grades, is less effective in fostering long-term engagement and creativity. The analysis also shows that men tend to have higher levels of both intrinsic and extrinsic motivation than women, with more variability in men's responses. These differences highlight the influence of gender on motivation, which can inform educational strategies to enhance motivation for all students.

Future studies could try using qualitative or mixed methodologies to gain a more detailed view of the subject topic. Qualitative methods, like as interviews or focus groups, can better capture people's experiences and viewpoints, offering insights that quantitative data alone may miss. A mixed methods strategy, which mixes qualitative and quantitative techniques, would allow researchers to triangulate their findings, increasing the validity and richness of the results. This complete method would allow for a more holistic investigation of the topic matter while also accommodating varied participant viewpoints, resulting in more robust and practical results.

Acknowledgments

The authors would like to express their deepest gratitude to blind reviewers and the editorial team of CJESS for making this article appear in the scholarly world. Without their contributions, this article would not have appeared in academic circles. Therefore, their contributions are considered irreplaceable and helpful for the whole society, especially the scholarly society of research and publication.

Conflict of interest

No potential conflict of interest was reported by the authors.

Funding

The authors received no financial support for the study, authorship, and/or publication of this article.

Declaration of AI usage

The authors used QuillBot to polish the language in some parts of the article. However, they declared that the content of this article is totally theirs.

Research approval

This article is part of a bigger project—a master’s thesis—required for a master’s degree in Teaching English to Speakers of Other Languages (MA-TESOL) at the National University of Cheasim Kamchaymear (NUCK), Kampong Cham campus, Kampong Cham, Cambodia. The university approved the mentioned project following the first author’s formal request.

References

- Abu Hasan, N. A., Ahmad, N., & Abdul Razak, N. ‘Aina. (2017). Factors that significantly affect college students’ CGPA. *International Academic Research Journal of Social Science*, 3(1), 77–81. https://www.iarjournal.com/wp-content/uploads/IARJSS2017_1_77-81.pdf
- Ahmad, M. S., Rafique, F., & Javaid, S. (2023). *The impact of external factors on learners’ learning English and their achievement at the university level*. 7(3), 562–572. <https://harf-o-sukhan.com/index.php/Harf-o-sukhan/article/view/927>
- Ahmadpour, S., & Ahmadpour, L. (2017). The effect of teaching English through critical friends on EFL learners’ speaking ability. *Science Arena Publications Specialty Journal of Language Studies and Literature*, 1(1), 52–62. <https://sciarena.com/article/effect-of-teaching-english-through-critical-friends-on-efl-learners-speaking-ability>
- Ahmed, S. A., Othman, B. J., Gardi, B., Sabir, B. Y., Ismael, N. B., Hamza, P. A., Sorguli, S., Aziz, H. M., Ali, B. J., & Anwar, G. (2021). *Students’ attitudes towards learning English in the Kurdistan region of Iraq*. 6(3), 072–087. <https://ssrn.com/abstract=3851337>
- Akbari, O., & Sahibzada, J. (2020). Students’ self-confidence and its impacts on their learning process. *American International Journal of Social Science Research*, 5(1), 1–15.
- Akiba, M., & Liang, G. (2016). Effects of teacher professional learning activities on student achievement growth. *The Journal of Educational Research*, 109(1), 99–110. <https://doi.org/10.1080/00220671.2014.924470>
- Al Said, D. M., Aljounaidi, A., & Dannoun, Z. O. (2022). The effect of autonomy and salary on job satisfaction: A case study of teachers in international schools in Kuwait. *Journal of Positive Psychology and Wellbeing*, 6(1), 2414–2431.
- Al-dalawi, V., Omar, F. R., Mahmood, M. A., & Mustafa, A. A. (2023). Friends’ impact on learners’ motivation to learn the English language: Kurdish EFL learners’ attitudes. *Koya University Journal of Humanities and Social Sciences*, 6(1), 160–169. <https://doi.org/10.14500/kujhss.v6n1y2023.pp160-169>
- Amiruddin, M., & Suparti, T. (2018). Madurese millennial students’ anxiety in learning English. *ISLLAC: Journal of Intensive Studies on Language, Literature, Art, and Culture*, 2(2), 34–41.

- Anwar, K. (2016). Panel discussion and the development of students' self-confidence. *English Language Teaching*, 9(4), 224–229. <https://eric.ed.gov/?id=EJ1095514>
- Aquilina, J. (2023). *An investigation into the attraction and rejection factors to the teaching profession: a Maltese case study* [Master's thesis, University of Malta]. University of Malta. <https://www.um.edu.mt/library/oar/handle/123456789/121245>
- Ardeo, G., & Miguel, J. (2016). *Students' attitudes toward learning English at junior high schools in the Aru district*, 32, 179–200.
- Ardeo, J. M. G. (2016). Engineering students' instrumental motivation and positive attitude towards learning English in a trilingual tertiary setting. *Ibérica*, 32, 179–200. <https://www.revistaiberica.org/index.php/iberica/article/view/178>
- Arshad, M., Attari, Z. H., & Elahi, E. (2012). Impact of parents' profession on their children's learning English in Pakistan. *International Journal of Learning & Development*, 2(1), 426–437. <https://doi.org/10.5296/ijld.v2i1.1384>
- Barron, B. (2003). When smart groups fail. *The Journal of The Learning Sciences*, 12(3), 307–359. https://doi.org/10.1207/S15327809JLS1203_1
- Baskerville, D., & Goldblatt, H. (2009). Learning to be a critical friend: From professional indifference through challenge to unguarded conversations. *Cambridge Journal of Education*, 39, 205–221. <https://doi.org/10.1080/03057640902902260>
- Bertha Garrett, H. (1985). Differential effects of children's self-perceptions and teachers' perceptions on black children's academic achievement. *The Journal of Negro Education*, 54(1), 71–81. <https://doi.org/10.2307/2294901>
- Delić, H. (2020). Attitude towards learning English as a foreign language. *Journal of Education and Humanities (JEH)*, 3(1), 67–80. <https://www.cceol.com/search/article-detail?id=883160>
- 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., & Khampirat, B. (2024). Exploring the motivation for English reading among Cambodian undergraduates: A cross-sectional study. *Authorea Preprints*. <https://doi.org/10.31124/advance.172020902.29145500/v1>
- Em, S., Yun, M., Dorn, B., Sao, V., & Sin, P. (2022). Cambodian students' motivation in learning the English language: A small-scale survey at a private high school in Phnom Penh. *Journal of Research on English and Language Learning (J-REaLL)*, 3(2), 104–114. <https://doi.org/10.33474/j-reall.v3i2.16764>
- Engin, G. (2020). An examination of primary school students' academic achievements and motivation in terms of parents' attitudes, teacher motivation, teacher self-efficacy, and leadership approach. *International Journal of Progressive Education*, 16(1), 257–276. <https://eric.ed.gov/?id=EJ1244883>
- Fan, X., & Chen, M. (2001). Parental involvement and students' academic achievement: A meta-analysis. *Educational Psychology Review*, 13, 1–22. <https://link.springer.com/article/10.1023/A:1009048817385>
- Filgona, J., Sakiyo, J., Gwany, D. M., & Okoronka, A. U. (2020). Motivation in learning. *Asian Journal of Education and Social Studies*, 10(4), 16–37. <https://doi.org/10.9734/ajess/2020/v10i430273>
- Gajjar, N.B. (2013). Ethical considerations in research. *International Journal for Research in Education*, 2(7), 1–8. https://www.rajmr.com/ijre/wp-content/uploads/2017/11/IJRE_2013_vol02_issue_07_02.pdf
- Ganapathy, M., & Ying, G. C. (2016). Attitude and motivation of students towards learning English as a second language in a secondary school in Penang. *Malaysian Journal of*

- Languages and Linguistics (MJLL)*, 5(2), 39–56.
<https://pdfs.semanticscholar.org/6236/37df5d7731bbfece70600e0ffb44af53f687.pdf>
- Getie, A. S. (2020). Factors affecting the attitudes of students towards learning English as a foreign language. *Cogent Education*, 7(1), 1–37.
<https://doi.org/10.1080/2331186X.2020.1738184>
- Ghafar, Z. (2024). Enjoying funny ways for learning English language skills: An overview. *Journal of Digital Learning and Distance Education*, 2(8), 658–666.
<https://doi.org/10.56778/jdlde.v2i7.176>
- Goodboy, A. K., & Myers, S. A. (2008). The effect of teacher confirmation on student communication and learning outcomes. *Communication Education*, 57(2), 153–179.
<https://doi.org/10.1080/03634520701787777>
- Gopang, I. B., Bughio, F. A., & Pathan, H. (2018). Investigating foreign language learning anxiety among students learning English in a public sector university, Pakistan. *MOJES: Malaysian Online Journal of Educational Sciences*, 3(4), 27–37.
<https://mojem.um.edu.my/index.php/MOJES/article/view/12784>
- Govil, P. (2013). Ethical considerations in educational research. *International Journal of Advancement in Education and Social Sciences*, 1(2), 17–22.
- Haditama, L., Wardi, Y., & Syamwil, S. (2018, April). *The effect of parents' attention, learning discipline, and learning motivation on the learning outcomes of students in the student financial accounting class*. In Proceedings of the International Conference on Educational, Social Sciences and Technology (ICeSST 2018) (pp. 789–798). Fakultas Ilmu Pendidikan, Universitas Negeri Padang.
https://www.gci.or.id/proceedings/view_article/115/1/icesst-2018
- Hendri, H., Mulyani, S. R., & Salim, E. (2020). The effect of achievement motivation, how to learn, and the economic conditions of parents on the GPA of computer science students. *Education, Sustainability, and Society*, 3(1), 20–26.
<https://doi.org/10.26480/ess.01.2020.20.26>
- Hidayati, T. (2018). Student language anxiety in learning English: Examining non-English major students in rural areas. *IJELTAL (Indonesian Journal of English Language Teaching and Applied Linguistics)*, 2(2), 95–113.
<https://ijeltal.org/index.php/ijeltal/article/view/55>
- Hosseinpour, V., Sherkatolabbasi, M., & Yarahmadi, M. (2015). The impact of parents' involvement in and attitude toward their children's foreign language programs for learning English. *International Journal of Applied Linguistics and English Literature*, 4(4), 175–185.
<https://www.aiac.org.au/journals/index.php/IJALEL/article/view/1447>
- Hsu, L. (2010). The impact of perceived teachers' nonverbal immediacy on students' motivation for learning English. *Asian EFL Journal*, 12(4), 188–204.
- Hugerat, M. (2016). How teaching science using project-based learning strategies affects the classroom learning environment. *Learning Environments Research*, 19(3), 383–395.
<https://doi.org/10.1007/s10984-016-9212-y>
- Igawa, K. (2008). The English language and its education in Cambodia, a country in transition. *Shitennoji University Bulletin*, 46(1), 343–369.
<https://cir.nii.ac.jp/crid/1520290885417145856>
- Islam, N. (1999). A few aspects of motivation: an overview of concepts, theories, and techniques. *Khulna University Studies*, 1(1), 103–108.
<https://ssrn.com/abstract=3203240>
- Jefiza, A. (2017). Students' motivation and attitudes toward learning English in an English course. *Vision*, 12(12), 1–10. <http://dx.doi.org/10.30829/vis.v12i12.172>

- Kazemi Malekmahmudi, M., & Kazemi Malekmahmudi, S. (2018). Attitude of Iranian students towards learning the English language. *Journal of Clinical and Basic Research*, 2(2), 35–39.
https://jcbr.goums.ac.ir/browse.php?a_id=145&sid=1&slc_lang=en
- Khan, I. A. (2016). Ethical considerations in educational research: A critical analysis. *British Journal of Education, Society & Behavioural Science*, 13(2), 1–8.
- Khan, I. A. (2016). Positive attitude and English language learning: psycho-pedagogic connections. *Arab World English Journal (AWEJ)*, 7(1), 432–444.
<https://doi.org/10.24093/awej/vol7no1.26>
- Kordi, A., & Baharudin, R. (2010). Parenting attitude and style and their effect on children's school achievements. *International Journal of Psychological Studies*, 2(2), 217–222.
- Lee, H.-C., & Chou, M.-J. (2014). A study of attitudes toward learning English at an early age by Taiwanese parents with young children. *Journal of Social Sciences*, 10(1), 1–8.
<https://doi.org/10.3844/jsssp.2014.7.14>
- Lestari, V. L. (2020). The role of parental attention and learning motivation in increasing students' English learning achievement. *Seltics Journal: Scope of English Language Teaching, Literature, and Linguistics*, 3(1), 12–21.
<https://doi.org/10.46918/seltics.v3i1.540>
- Locke, E. A., & Schatke, K. (2019). Intrinsic and extrinsic motivation: Time for expansion and clarification. *Motivation Science*, 5(4), 277–290. <https://doi.org/10.1037/mot0000116>
- Mahmoud, S., & Mahmoudi, A. (2015). Internal and external factors affecting learning English as a foreign language. *International Journal of Language and Linguistics*, 3(5), 313–322. <https://doi.org/10.11648/j.ijll.20150305.16>
- Mat, S. S. C., & Yunus, M. M. (2014). Attitudes and motivation towards learning English among FELDA school students. *Australian Journal of Basic and Applied Sciences*, 8(5), 1–8. <https://core.ac.uk/download/pdf/357530644.pdf>
- McGregor, S. L. T. (2023). Ethical considerations in research about organizations: Compendium of strategies. *Ethics in Progress*, 14(2), 4–23.
<https://doi.org/10.14746/eip.2023.2.1>
- Meepradit, K., Auamnoy, T., & Leelakanok, N. (2022). Factors affecting GPA in higher education in Asia: A systematic review. *International Journal of Early Childhood Special Education (INT-JECSE)*, 14(1), 1–15. <https://doi.org/10.9756/INT-JECSE/V14I1.190>
- Menheere, A., & Hooge, E. H. (2010). Parental involvement in children's education: A review study about the effect of parental involvement on children's school education with a focus on the position of illiterate parents. *Journal of the European Teacher Education Network (JETEN)*, 6, 144–157.
- Mirhadizadeh, N. (2016). Internal and external factors in language learning. *International Journal of Modern Language Teaching and Learning*, 1(5), 188–196.
- Moraes, A. H. C. D., & Barros, S. M. D. (2020). Reflections on policies which guide English language teaching to the deaf in Brazil. *Brazilian Journal of Development*, 6(10), 81577–81589. <https://doi.org/10.34117/bjdv6n10-546>
- Mouili, M., Sliman, B., Mustapha, B., & Yahia, M. (2014). Attitudes and motivations in learning English as a Foreign language. *International Journal of Arts & Sciences*, 7(3), 117–128.
- Muijs, D., Kyriakides, L., Werf, G. van der, Creemers, B., Timperley, H., & Earl, L. (2014). State of the art: Teacher effectiveness and professional learning. *An International Journal of Research, Policy and Practice*, 25(2), 231–256.
<https://doi.org/10.1080/09243453.2014.885451>

- Naibaho, L. (2022). Factors affecting students' failures due to anxiety in learning English. *English Review: Journal of English Education*, 10(3), 911–918. <https://doi.org/10.25134/erjee.v10i3.7128>
- Noreen, S., Ahmed, M., & Esmail, A. (2015). Role of students' motivation, attitude, and anxiety in learning English at intermediate level in Pakistan: A gender-based study. *Educational Research International*, 4(2), 96–108. <http://erint.savap.org.pk/PDF/Vol.4.2/ERInt.2015-4.2-10.pdf>
- Oka, O. F. (2014). *Impact of teacher motivation on the academic performance of students* [Conference paper]. National Association of Mathematics Students' Conference.
- Oktafiani, Z., & Yusri, Y. (2021). The relationship of self-confidence to students' learning achievement. *Counseling and Humanities Review*, 1(1), 20–26. <https://doi.org/10.24036/000411chr2021>
- Passiatore, Y., Pirchio, S., Oliva, C., Panno, A., & Carrus, G. (2019). Self-efficacy and anxiety in learning English as a Foreign language: Singing in class helps speaking performance. *Journal of Educational, Cultural and Psychological Studies (ECPS Journal)*, (20), 121–138. <https://doi.org/10.7358/ecps-2019-020-passi>
- Pathan, H., Shahriar, A., & Mari, M. A. (2010). Motivation for learning English in Pakistan. *EFL Annual Research Journal SALU*, 12(2), 75–91.
- Purnama, N. A., Rahayu, N. S., & Yugafiati, R. (2019). Students' motivation in learning English. *PROJECT (Professional journal of English education)*, 2(4), 539–544. <https://doi.org/10.22460/project.v2i4.p539-544>
- Purwanto, M. B., Despita, D., & Agustin, A. (2023). The role of parents in motivating students to learn English. *FLIP: Foreign Language Instruction Probe*, 2(1), 12–17.
- Rai, H. (2022). *The effects of classroom participation strategies on students' learning outcomes in English*, 3(3), 93–100. <https://doi.org/10.47852/bonviewCETR2022030305>
- Rehman, A., Bilal, H. A., Sheikh, A., Bibi, N., & Nawaz, A. (2014). The role of motivation in learning the English language for Pakistani learners. *International Journal of Humanities and Social Science*, 4(1), 254–258.
- Rintaningrum, R., Mahfud, C., Trisyanti, U., Saifulloh, M., & Prasetyo, B. (2022). Home-based practical parents' involvement in assisting children to learn English. *Jurnal Obsesi: Jurnal Pendidikan Anak Usia Dini*, 6(6), 6429–6442.
- Riyanti, D. (2019). The role of motivation in learning English as a foreign language. *Journal of English Language Teaching Innovations and Materials (JELTIM)*, 1(1), 29–35.
- Ryan, R. M., & Deci, E. L. (2000). Intrinsic and extrinsic motivations: Classic definitions and new directions. *Contemporary educational psychology*, 25(1), 54–67.
- Safian, N., Ngah, N. S., Hussain, A. M., Yaacob, M. A., Ramdan, M. R., & Rahmat, N. H. (2023). Is there a relationship between internal and external factors in learning? *Journal of Academic Research in Business and Social Sciences*, 13(9), 1546–1564. <http://dx.doi.org/10.6007/IJARBS/v13-i9/18541>
- Sari, M. N., & Ningsih, P. E. A. (2022). An analysis of students' motivation and anxiety in learning English at SMA Negeri 6 Kerinci. *Pendekar: Jurnal Pendidikan Berkarakter*, 5(3), 181–188. <https://doi.org/10.31764/pendekar.v5i3.10994>
- Sari, M. N., & Ningsih, P. E. A. (2023). An analysis of students' anxiety in learning English at the eleventh grade of SMA Negeri 10 Kerinci. *EDU Research*, 4(3), 83–97. <https://doi.org/10.47827/jer.v4i3.115>
- Sarmita, R. N. (2018). Contributing factors to the low-grade point average (GPA) of undergraduate students. *International Journal of Economics, Business and Management Research*, 2(3), 1–27.

- Seda, E., & Kulmetov, Z. (2016). The factors affecting learners' motivation in English language education. *Journal of Foreign Language Education and Technology*, 1(1), 18–38. <https://www.learntechlib.org/p/208895/>
- Seemiller, C., Grace, M., Campagnolo, P. D. B., Alves, I. M. D. R., & De Borba, G. S. (2020). What makes learning enjoyable? Perspectives of today's college students in the US and Brazil. *Journal of Pedagogical Research*, 5(1), 1–17. <https://doi.org/10.33902/JPR.2020065267>
- Shanti, T. I., Janssens, J. M. A. M., & Setiadi, B. (2021). Friends' support, motivation to learn, emotional adjustment, and academic performance among Indonesian first-year students. *Jurnal Psikologi*, 48(2), 183–198. <https://doi.org/10.22146/jpsi.34060>
- Sihotang, L., Setiawan, D., & Saragi, D. (2017). The effect of learning strategy and self-confidence on students' learning outcomes in Elementary School. *IOSR Journal of Research & Method in Education (IOSR-JRME)*, 7(4), 65–72. <https://doi.org/10.9790/7388-0704016572>
- Siswaningsih, W., Firman, H., & Khoirunnisa, A. (2017). Development of a two-tier diagnostic test pictorial-based for identifying high school students' misconceptions on the mole concept. *Journal of Physics: Conference Series*, 812(1), 1–7. <https://doi.org/10.1088/1742-6596/812/1/012117>
- Stroupe, R., & Kimura, K. (2015). *ASEAN integration and the role of English language teaching*. CamTESOL.
- Sumanti, C. T., & Muljani, R. (2021). Parents' involvement and its effects on English young learners' self-efficacy. *A Journal of Culture, English Language Teaching, Literature and Linguistics*, 8(1), 78–89. <https://doi.org/10.22219/celtic.v8i1.14632>
- Syukur, A. (2016). Encouraging students to have positive attitudes toward learning English. *Ethical Lingua: Journal of Language Teaching and Literature*, 3(2), 122–130. <https://doi.org/10.30605/25409190.v3.02.122-130>
- Tohidi, H., & Jabbari, M. M. (2012). The effects of motivation in education. *Procedia - Social and Behavioral Sciences*, 31, 820–824. <https://doi.org/10.1016/j.sbspro.2011.12.148>
- Tran, T. T. L. (2022). An investigation into the causes of students' anxiety in learning English speaking skills. *International Journal of TESOL & Education*, 2(3), 183–196. <https://doi.org/10.54855/ijte.222312>
- Tuan, L. T. (2012). Empirical research into EFL Learners' motivation. *Theory and Practice in Language Studies*, 2(3), 430–439. <https://doi.org/10.4304/tpls.2.3.430-439>
- Tunçel, H. (2015). The relationship between self-confidence and learning Turkish as a foreign language. *Educational Research and Reviews*, 10(18), 2575–2589. <https://doi.org/10.5897/ERR2015.2445>
- Vincent, T. V., & Kumar, M. S. (2019). Motivation: Meaning, definition, nature of motivation. *International Journal of Yogic, Human Movement and Sports Sciences*, 4(1), 483–484.
- Wangdi, N. (2019). *Language learning motivation of grade 12 learners in Bhutan* [Doctoral dissertation, Rangsit University]. Rangsit University Institutional Repository. <https://rsuir-library.rsu.ac.th/handle/123456789/179>
- Wangdi, S., & Jigyel, K. (2021). Parental involvement supporting children with dyscalculia in Gawa middle secondary school: A case study. *International Journal of Science and Innovative Research*, 2(11), 1–22. <https://ijesir.org/wp-content/uploads/2022/02/01000107IJESIRnew-2.pdf>
- Weda, S., & Sakti, A. E. F. (2018). Factors influencing students' anxiety in English as a foreign language classroom. *Journal of Physics: Conference Series*, 1028(1), 1–5. <https://doi.org/10.1088/1742-6596/1028/1/012100>

- Wulandari, C., Surtikanti, M. W., & Agung, A. S. S. N. (2020). A case study of internal and external factors on the difficulties in learning English. *JOEEL (Journal of English Education and Literature)*, 1(2), 43–48.
<http://journal.stkippamanetalino.ac.id/index.php/bahasa-inggris/article/view/81>
- Wulanningtyas, N. D., & Fauzan, F. (2022). The influence of creativity and learning motivation on students' learning independence with friend support as moderating variables. *International Journal of Social and Management Studies*, 3(1), 196–207.
<https://doi.org/10.5555/ijosmas.v3i1.99>
- Yeung, A. S., Lau, S., & Nie, Y. (2011). Primary and secondary students' motivation in learning English: Grade and gender differences. *Contemporary Educational Psychology*, 36(3), 246–256. <https://doi.org/10.1016/j.cedpsych.2011.03.001>
- Yu Lin, C., Kai Huang, C., & Jung Ko, C. (2020). The impact of perceived enjoyment on team effectiveness and individual learning in a blended learning business course: The mediating effect of knowledge sharing. *Australasian Journal of Educational Technology*, 36(1), 126–141. <https://doi.org/10.14742/ajet.4446>
- Zheng, T. (2018). Influence of negative transfer of mother tongue on Chinese English learners' pronunciation. *Theory and Practice in Language Studies*, 8(11), 1478-1484.
<https://doi.org/DOI:> <http://dx.doi.org/10.17507/tpls.0811.12>
- Zulfikar, T., Dahliana, S., & Sari, R. A. (2019). An Exploration of English Students' Attitude towards English Learning. *English Language Teaching Educational Journal*, 2(1), 1-12. <https://doi.org/10.12928/eltej.v2i1.947>

Use of digital tools in learning listening: A survey of EFL students at the National University of Battambang, Cambodia

Navin Chhong¹, Voithna Nhean², Phouert Phal³, Dalin Leng⁴, Reaksa Sam⁵

^{1, 2, 3, 4, 5} National University of Battambang (NUBB), Battambang, Cambodia

Article info

Article history

Received: July 14, 2024

Revised: April 05, 2025

Accepted: May 07, 2025

Keywords

Digital technology

English language learning

Listening skills

Mobile applications

Student engagement

Article type

Research article

Abstract

The widespread adoption of digital tools today has fundamentally transformed many facets of education. As such, the purpose of this research is to investigate how the utilization of digital technology could assist students in developing their listening skills. To achieve this, the authors evaluate the efficacy of several digital tools, including podcasts, video tutorials, and mobile applications, to promote active comprehension and listening by reviewing the content that has already been released. This study employs the quantitative approach, and specifically, the quantitative data obtained from surveys of students who are now in their third and fourth years of study, studying English literature at the National University of Battambang (NUBB). In this context, the students took part in a wide range of listening situations that were based on digital tools. As a result, according to the findings, the students' attention and engagement increased, and they also demonstrated a significant improvement in their listening abilities, which they observed in themselves. Moreover, by conducting this study, the types of digital tools that the students utilized, such as computers and mobile phones, as well as applications and social media, were improved. However, the study demonstrated several difficulties the students encountered when utilizing digital technologies. However, the implementation of digital technologies in educational settings could lead to learning experiences that were both more effective and more enjoyable, which may be of greater benefit to both educators and students. Finally, researchers are encouraged to explore how different types of digital tools impact various language skills across diverse educational contexts and student proficiency levels.

This is an open-access article under the [CC BY-SA](#) license.



Corresponding author

Phouert Phal

National University of Battambang (NUBB), Battambang, Cambodia

Email: phalphouert2002@gmail.com

1. Introduction

Technology has been used a lot more since the end of the 20th century, especially in this 21st century, when it has spread throughout the world and completely changed our way of life (Henseler et al., 2016). Consequently, technology has become an essential part of our lives because it teaches us how the modern world works and how to adapt to the exciting and new society that we live in. This is especially evident in schools, where a lot of young and adult learners, especially students, are more knowledgeable about technology nowadays (Haleem et

al., 2022). As a result, technology is widely used and included in the educational system (Szymkowiak et al., 2021).

About language learning, there are four important skills in learning English as a foreign language: listening, speaking, reading, and writing. Among these, listening is considered the most important skill in learning English. Indeed, good listening skills are necessary for understanding content. Over time, the way that listening is taught in schools has improved and changed, especially with the use of media and educational tools. Furthermore, the listening resources that are used in classrooms come in many different forms. Nevertheless, most students find it difficult to remember what they hear and learn. Therefore, we need to be more creative and interested in using digital tools as we learn listening skills (Whalley et al., 2021).

Technology and digital tools are closely connected with studying, as they help make learning more enjoyable and engaging. In particular, listening skills can be developed in various ways, including through the use of digital tools, where teachers utilize technology to teach specific subjects. Moreover, these tools are simple and convenient to use, especially since today's students are increasingly proficient with technology, which also enables them to explore diverse learning styles (Venkatesh, Thong, & Xu, 2012). As a result, the use of technology can enhance students' success and productivity. Indeed, digital tools can boost students' productivity and achievement both inside and outside the classroom (Parmin et al., 2021).

Furthermore, technology and digital tools are now integrated into the teaching and learning process by both teachers and students (Nunes et al., 2024). In addition, technology-based media have influenced new learning styles by making information more accessible and easier to produce (Paszke et al., 2019). Specifically, the use of digital tools in listening classes is beneficial because it simplifies and reduces the time required for students to prepare, learn, and review lessons (Han, 2015). Additionally, technology-based listening lessons help students make connections and deepen their understanding of prior knowledge (Gong et al., 2023).

This study will focus on survey responses from third- and fourth-year English literature students at NUBB. However, the study may be limited by the sample size, as a small sample might not accurately represent the broader population of learners, which could affect the generalizability of the findings. There is also a possibility that bias may occur in participant selection or data analysis. Nevertheless, various sources will be used as references to support the study and strengthen its validity.

When conducting the study, researchers must consider criteria such as sample size and coverage, time, budget, and personal constraints, as well as the specific aspects and issues being investigated. Furthermore, excluding certain methods or theoretical frameworks may influence the research outcomes within the study period.

The following are the research questions for this study:

1. To what extent do students believe that digital tools enhance their ability to comprehend spoken language effectively, and how do they evaluate their improvement in listening comprehension after using these tools?
2. How frequently do students use digital tools for improving their listening skills compared to other language learning activities, and which digital tools do they find most effective?

3. Do students prefer digital tools to traditional methods for learning listening skills, and how do they compare the effectiveness of digital tools to traditional methods in improving their listening abilities?

2. Literature review

The topic of debate in the context of the application of digital tools in listening training is the utilization of technology in the process of learning how to listen effectively. The following is a list of potential matters that could be discussed concerning this issue.

2.1. Types of digital tools

There are various digital tools available that can help in learning listening skills, such as podcasts, audiobooks, online courses, and virtual reality simulations. Audiobooks and podcast platforms, such as websites and apps like SoundCloud, Audacity, and Anchor, allow learners to create, share, and listen to audio recordings. Currently, podcasts are listened to not only for entertainment but also for educational purposes, one of which is to improve students' listening skills (Sabrila & Apoko, 2022). For online courses, students can use platforms like Coursera, edX, and Udemy to offer a range of online courses in various languages that include listening exercises and activities (Ayo, 2023). Moreover, VR and AR tools like ImmerseMe and EngageVR provide immersive language learning experiences that allow learners to practice listening skills in a virtual environment (see Heng et al., 2023; Sim & Em, 2023).

2.2. Advantages of digital tools

Digital tools offer several benefits for learning listening skills, including convenience, accessibility, and the ability to provide immediate feedback. With the use of digital tools, students can practice listening at their own pace and convenience without having to stay in a classroom or needing a teacher. It is a well-known fact that practically every student has at least one mobile device, as it has become a very convenient tool to get information (Em et al., 2024). Burns (2011) noted that learning will usually take place outside the classroom, specifically in students' homes, cars, or on personal MP3 players while they travel from one location to another. Online digital learning allows students to access educational content and resources from anywhere, at any time. This feature makes education more accessible to balance personal, professional, and academic life. Digital tools offer interactive exercises, quizzes, and games that make learning listening skills more engaging and fun. This helps learners retain information better and develop a more profound understanding of the language. Furthermore, digital tools for learning listening are often more cost-effective than traditional classroom-based methods, as they eliminate the need for physical resources such as textbooks and audio equipment.

2.3. Tips for using digital tools

To learn effectively, students need to have guidance. First, they have to choose the right tools. Choosing the digital tools that best fit your learning goals is important because there are many options available for improving listening skills (Mohammed, 2022). They need to think about things like the kind of material they are keen to learn, how they learn best, and how fun they want their learning to be. Thereafter, they need to set goals. Before starting their learning journey, they have to set specific goals for what they want to achieve. These objectives will help them stay focused and motivated as they progress through the resources. Then they must

practice regularly. Practice is key to strengthening our listening skills. Aim to listen for at least 15 to 30 minutes a day and gradually increase the duration as you become more comfortable.

2.4. Digital tools for learning listening

There are thousands of digital tools that we can use to learn listening. They can use websites like YouTube and TED Talks, and podcast platforms like Spotify and Apple Podcasts offer a vast library of audio and video content that learners can use to strengthen their listening skills (Li et al., 2020). Teachers can utilize online teaching media that offer various listening materials. One of the most popular media that is accessible anytime and anywhere is YouTube (Andriani et al., 2022). Or they can use apps like Duolingo, Babbel, and Rosetta Stone to offer interactive lessons that teach listening skills through games, quizzes, and audio exercises (Kumar et al., 2022). They can also use VR and AR tools like ImmerseMe and R, which allow learners to immerse themselves in virtual environments where they can practice listening skills in real-life scenarios (Bendeck-Soto et al., 2020; Kyrilitsias & Michael-Grigoriou, 2022).

2.5. Listening skills in language learning

Listening has an important role both in daily life and in academic contexts, as it is crucial for people to sustain effective communication. Listening skills are critical in learning English. Lepola et al. (2023) pointed out that there is a direct relationship between listening and speaking, and that individuals whose listening skills are not developed will not be able to speak eloquently. Many experts consider listening to be the most challenging skill for non-native English speakers to master. Listening skills are essential for learning a language because they provide learners with exposure to the language, help them develop comprehension, improve pronunciation, build confidence, and promote cultural understanding (Tacarraoucht et al., 2022). Listening comprehension sets a foundation for the future acquisition of speaking. By practicing listening exercises regularly, learners can develop strong listening skills that will enable them to communicate effectively in the language they are learning (Em, 2023).

2.6. Research gap

Despite the increasing global focus on incorporating digital technologies into language education, a significant study gap exists in the Cambodian context regarding their specific effects on enhancing students' listening skills. International studies have underscored the efficacy of many digital resources, such as podcasts, online courses, and virtual reality environments, yet empirical research about Cambodian students' perceptions, access, and utilization of these platforms for enhancing listening comprehension remains scarce. Elements such as digital literacy, internet accessibility, and the presence of localized content may affect the acceptance and efficacy of these tools in Cambodia. Furthermore, there is an absence of studies contrasting the preferences and perceived efficacy of digital technologies with conventional techniques among Cambodian learners. This gap highlights the necessity for context-specific research that examines students' attitudes, usage patterns, and the actual effects of digital technologies on the development of listening skills in Cambodian educational contexts.

3. Methodology

This section outlines a research technique that encompasses the entire research process, starting from the initial stages of ideation to the final points. It highlights four fundamental components that act as a framework for the inquiry: the research design, the research instruments and

apparatus, the methodologies for data collection, and the interpretation of the results. The research design not only establishes the overarching framework for the study but also delineates the precise methods employed to address the research questions (Turner et al., 2017). The section on tools and equipment delineates the specific procedures employed for data collection, including surveys tailored to the intended audience. The data collection processes elucidate the methods and timing of data acquisition, ensuring the maintenance of consistency and reliability throughout the procedure. Finally, the data analysis section outlines the methodologies employed to interpret the collected data and to draw significant conclusions regarding students' experiences with digital tools in enhancing their listening skills.

3.1. Research design

The current study employs quantitative methods for the whole research process (Amaratunga et al., 2002). Quantitative research is important for studying the use of digital tools in learning listening because it allows researchers to collect and evaluate large quantities of data in numbers, which can provide an understanding of how effective these tools are at improving listening skills. Quantitative research can provide information on how learners perceive and interact with digital tools for listening, as well as the problems and benefits they face. This data aids educators in comprehending how to tailor digital tools to the requirements of diverse learners and learning scenarios.

3.2. Samples and sampling techniques

The sampling techniques of the current study were simple random based on a volunteer basis. Specifically, seventy students who were enrolled in the third year of studies at NUBB as of 2024 made up the sample size. At the time, they were using digital technologies to assist them in their studies in order to improve their listening abilities. Therefore, to gather data that allowed researchers to examine and investigate how the technology aided the students in improving their listening skills, the researchers requested that the students complete the survey questionnaire.

3.3. Instruments

A survey using Google Forms served as the primary research instrument for this study (see Em, 2021). It was designed to gather information from students regarding their perspectives, attitudes, and experiences with digital tools used in listening skill development. The main objective of the survey was to explore how digital technologies were utilized in the process of acquiring listening skills. To gain a deeper understanding of students' experiences, the survey included both Likert-scale (agree–disagree) items and open-ended questions that allowed for varied and detailed responses. Specifically, the survey aimed to examine students' perceptions of the effectiveness of digital listening tools, as well as the challenges they had encountered while using them (see Em et al., 2022).

3.4. Data collection procedures

The data-collecting procedure's main goal was to gather information on how well different digital tools may improve learners' listening abilities. The participants were EFL students at NUBB. They were willing to engage in the study and provided feedback on the digital tools used. Data collection also aimed to analyze the collected data from the survey to determine the effectiveness of the digital tools in enhancing listening skills and, additionally, to consider the feedback provided by the participants to identify areas of strength and areas for improvement

in the tools. The participants were well-informed, and they volunteered to fill in the questionnaire items ready set in the Google Forms.

3.5. Data analysis

The collected quantitative data were evaluated through descriptive statistical methods (Mishra et al., 2019) to assess students' views, usage, and preferences concerning digital tools for enhancing listening abilities. Frequency and percentage distributions were utilized to encapsulate responses to each survey topic, facilitating a clear comprehension of patterns and trends within the data. The survey items were categorized thematically based on perceptions, utilization and efficacy, and preferences for digital versus traditional approaches. Microsoft Excel was utilized to compute totals, agreement and disagreement rates, and to provide tabular representations of the data. This analytical method enabled the recognition of overarching trends among participants without employing inferential statistical analysis.

4. Findings and discussion

This section delineates the results of the survey about students' perceptions of utilizing digital technologies for enhancing listening abilities. It examines the efficacy of digital tools in improving listening comprehension, their usage frequency relative to conventional approaches, and students' preferences toward their application. The analysis contextualizes these findings within the current literature, offering insights into the transformative impact of digital technologies on language acquisition and the potential difficulties students encounter in properly utilizing these resources.

4.1. Findings

Table 1. Students' perceptions of the use of digital tools in learning listening skills

No.	Survey Questions	SA	A	N	D	SD	TA	TA (%)	TD	TD (%)
1.	Can digital tools enhance language learners' ability to comprehend spoken language effectively?	11	41	13	4	1	52	74.2%	5	7.14%
2.	I have found digital tools to help improve my listening abilities.	9	45	11	2	3	54	77.1%	5	7.14%
3.	I encountered some challenges when using digital tools for learning listening.	3	45	15	7	0	48	68.5%	7	10.0%
4.	I noticed improvements in my listening comprehension since incorporating digital tools.	4	41	17	8	0	45	64.2%	8	11.4%

5.	Digital tools have significantly contributed to my overall progress in learning to listen.	4	42	15	8	1	46	65.7%	9	12.8%
6.	Using digital tools in learning to listen has been effective for me.	5	46	12	6	1	51	72.8%	7	10.0%

Note: SA = Strongly Agree, A = Agree, N = Neutral, D = Disagree, SD = Strongly Disagree, TA = Total Agreement (SA + A), TA (%) = Total Agreement Percentage, TD = Total Disagreement (D + SD), TD (%) = Total Disagreement Percentage

As can be shown in Table 1, the vast majority of students (74.29%) are in agreement that the use of digital technologies can improve their capacity to grasp spoken language when compared to the number of students who are in disagreement (7.14%). Similar to the previous statement, 77.14% of respondents stated that digital tools were useful in enhancing their listening abilities, whereas the same number of respondents (7.14%) expressed dissatisfaction with this statement. 68.57% of respondents agreed that they had experienced some difficulties when using digital technologies, whereas 10% of respondents did not agree with this statement. Moreover, 64.29 percent of students reported gains in their listening comprehension since the implementation of digital tools, while 11.43 percent of students did not report any such changes. Only 12.86% of respondents thought that digital tools did not considerably contribute to their overall progress in learning listening, while the remaining 65.71% of respondents considered that digital tools did contribute significantly. In conclusion, 72.86 percent of the students thought that the utilization of digital resources for learning listening was successful for them, whereas ten percent of the students did not share this view.

Table 2. Students' usage and perceived effectiveness of digital tools in learning listening skills

No.	Survey Questions	SA	A	N	D	SD	TA	TA (%)	TD	TD (%)
1.	I use digital tools more frequently than other language learning activities for improving my listening skills.	4	41	19	5	1	45	64.2%	6	8.5%
2.	I have found some specific digital tools to be particularly effective for learning listening.	7	42	16	4	1	49	70.0%	5	7.1%

Note: SA = Strongly Agree, A = Agree, N = Neutral, D = Disagree, SD = Strongly Disagree, TA = Total Agreement (SA + A), TA (%) = Total Agreement Percentage, TD = Total Disagreement (D + SD), TD (%) = Total Disagreement Percentage

According to the data presented in Table 2, 64.2% of the students stated that they utilized digital tools more frequently than other language learning activities to enhance their listening abilities, while only 8.5% of the students were in disagreement. While this was going on, seventy percent of those who participated in the survey believed that some digital tools were particularly useful for learning how to listen, with only seven-point one percent expressing opposition. According

to these data, there is a significant preference among the students for the utilization of digital resources in the development of listening skills, as well as a perception of the worth of doing so.

Table 3. Students' preferences and recommendations regarding digital tools vs. traditional methods in learning listening skills

No.	Survey Questions	SA	A	N	D	SD	TA	TA (%)	TD	TD (%)
1.	I prefer using digital tools to traditional methods for learning listening.	8	35	21	5	1	43	61.4%	6	8.5%
2.	I believe that digital tools are more effective than traditional methods for improving listening skills.	4	40	18	4	4	44	62.8%	8	11.4%
3.	I recommend the use of digital tools for learning listening skills from other language learners.	8	42	12	7	1	50	71.4%	8	11.4%

Note: SA = Strongly Agree, A = Agree, N = Neutral, D = Disagree, SD = Strongly Disagree, TA = Total Agreement (SA + A), TA (%) = Total Agreement Percentage, TD = Total Disagreement (D + SD), TD (%) = Total Disagreement Percentage

Table 3 highlights the viewpoints of students regarding their preferences and recommendations regarding the utilization of digital tools in comparison to traditional techniques when it comes to the acquisition of listening skills. Digital tools were preferred by 61.4% of the students over traditional methods, while just 8.5% of the students were in disagreement with this preference. Likewise, 62.8% of respondents stated that digital technologies were more effective than traditional approaches, whereas 11.4% of respondents expressed disagreement with this statement. Furthermore, 71.4% of the participants suggested that other language learners make use of digital resources for improving their listening skills. This indicates that digital learning tools have a significant endorsement.

4.2. Discussion

This study sought to examine students' perspectives on the efficacy of digital tools in developing listening skills, their frequency of use, and their preferences relative to conventional techniques. The survey data findings, illustrated in the three tables, provide significant insights into the function of digital tools in language acquisition and students' experiences and preferences within this framework.

Table 1 indicates that most students regard digital technologies as a beneficial method for improving their listening comprehension abilities. 74.29% of respondents concurred that digital tools may markedly enhance their proficiency in understanding spoken language, whereas 77.14% deemed these technologies beneficial for augmenting their listening skills. Furthermore, 64.29% of students indicated enhancements in their listening comprehension

following the integration of digital resources into their educational practices. The findings corroborate other studies indicating that the judicious integration of digital resources into language education improves the overall learning experience (Paszke et al., 2019; Venkatesh et al., 2012). The favorable feedback concerning enhancements in hearing comprehension might be ascribed to the adaptability and availability of digital technologies, which facilitate students' engagement with listening materials at their own pace and convenience (Han, 2015).

Nevertheless, 10% of the respondents reported facing difficulties while utilizing digital tools for listening. The hurdles may include technological problems such as inadequate internet connectivity and unfamiliarity with specific tools, potentially impacting their learning experience (Gong et al., 2023). Consequently, although the overall perception is favorable, the limitations underscore the necessity for enhanced support and direction in the successful utilization of these technologies.

Table 2 indicates that 64.2% of students reported utilizing digital resources more often than other language learning activities to enhance their listening abilities. This signifies a substantial dependence on technology for language acquisition, aligning with the increasing trend of integrating digital media into educational environments (Kudale & Buktar, 2022). Moreover, 70% of the students identified certain digital tools as very useful for enhancing listening skills, indicating that some tools had distinctive features that better correspond with students' learning preferences.

The table also reveals that students are actively using digital tools with intent, indicating their awareness of the resources' potential to enhance their listening skills. The inclination towards digital tools instead of traditional techniques may indicate their congruence with students' digital proficiency, hence enhancing their comfort and efficiency in technology-mediated learning (Parmin et al., 2021).

Table 3 indicates that a majority of students (61.4%) favored the use of digital resources over traditional approaches for listening comprehension. Moreover, 62.8% of students said that digital tools were superior to traditional techniques in enhancing their listening skills. The results indicate a growing trend in the integration of technology in education, as digital tools offer interactive and interesting learning experiences that traditional methods often lack (Kudale & Buktar, 2022).

Furthermore, 71.4% of the students advocated for the utilization of digital tools to enhance listening skills among other language learners, underscoring their favorable experiences and confidence in the effectiveness of these resources. This support corresponds with research indicating that students having access to digital learning tools frequently express enhanced motivation and happiness in their learning experience (Chan et al., 2024; Venkatesh et al., 2012). These findings underscore the potential of digital tools to cultivate a more student-centered learning environment, granting learners increased autonomy over their educational experience.

5. Conclusion

In particular, the findings of this study lend support to the expanding body of literature that highlights the positive impact that digital technologies have on language learning, particularly with regard to the enhancement of listening abilities. In general, students report a higher level of involvement, improved comprehension, and a preference for digital tools over traditional methods of instruction. On the other hand, the difficulties that some students have experienced

indicate that there is a requirement for continuous support and training in order to make good use of these tools.

While giving sufficient advice and resources, educators and educational institutions must take into consideration the possibility of incorporating digital tools into the listening curriculum in a more extended manner. This would ensure that all students are able to make the most of the benefits that these tools offer. The precise digital tools that students find to be the most effective could be the subject of future research, as could the investigation of the long-term effects that the use of digital tools has on the acquisition of language.

Acknowledgments

The authors would like to express their sincere gratitude to our teacher, Mr. **Ly Sovann**, for his exceptional guidance, support, and insightful feedback throughout this study. Their heartfelt thanks also go to their dedicated teammates for their hard work, collaboration, and valuable contributions. Additionally, the authors deeply appreciate the participants who generously shared their time and experiences, which greatly enriched the quality and depth of this study.

The authors would also like to express their deepest gratitude to blind reviewers and the editorial team of CJESS for making this article appear in the scholarly world. Without their contributions, this article would not have appeared in academic circles. Therefore, their contributions are considered irreplaceable and helpful for the whole society, especially the scholarly society of research and publication.

Conflict of interest

No potential conflict of interest was reported by the authors.

Funding

The authors received no financial support for the study, authorship, and/or publication of this article.

Declaration of AI usage

The authors used QuillBot to polish the language in some parts of the article. However, they declared that the content of this article is totally theirs.

References

- Amaratunga, D., Baldry, D., Sarshar, M., & Newton, R. (2002). Quantitative and qualitative research in the built environment: application of “mixed” research approach. *Work study*, 51(1), 17–31. <https://doi.org/10.1108/00438020210415488>
- Andriani, K., Ardiana, & Firman. (2022). Teaching media in EFL classrooms: What are they and why select them? *Journal of Language Testing and Assessment*, 2(1), 87–97. <https://doi.org/10.56983/jlta.v2i1.214>
- Ayo, E. (2023). Blending Coursera in CEU courses: A study on the quality and educational impact. *GEO Academic Journal*, 4(1), 1–25. <https://doi.org/10.56738/issn29603986.geo2023.4.43>
- Bendeck-Soto, J. H., Toro Ocampo, D. C., Beltrán Colon, L. D. C., & Valencia Oropesa, A. (2020). Perceptions of the ImmerseMe virtual reality platform to improve English

- communicative skills in higher education. *International Journal of Interactive Mobile Technologies (IJIM)*, 14(7), 4–15. <https://doi.org/10.3991/ijim.v14i07.12181>
- Burns, M. (2011). *Distance education for teacher training: Modes, models, and methods*. Education Development Center.
- Chan, S., Maneewan, S., & Koul, R. (2024). Cooperative learning in teacher education: A means to foster learning motivation and academic engagement among EFL pre-service teachers. *European Journal of Teacher Education*, 47(4), 658–675. <https://doi.org/10.1080/02619768.2022.2117026>
- 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. (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., Chin, P., & Pen, D. (2024). COVID-19 and school closures: Transformation of shadow education in the Cambodian context. In Md. B. Alam (Ed.), *Shadow education in Asia: Policies and practices* (pp. 136–159). IGI Global. <https://doi.org/10.4018/979-8-3693-2952-8.ch009>
- Em, S., Phann, S., & Khan, S. (2022). Cambodian EFL university students' perceptions of online learning effectiveness during the COVID-19 pandemic: A survey study. *Cambodian Journal of Educational Research*, 2(2), 15–34. <https://doi.org/10.62037/cjer.2022.02.02.02>
- Gong, Y., Luo, H., Liu, A. H., & Karlinsky, L. (2023). *Listen, think, and understand*. arXiv. <https://arxiv.org/abs/2301.00000>
- 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>
- Han, M. (2015). An empirical study on the application of cooperative learning to English listening classes. *English Language Teaching*, 8(3), 177–184. <https://eric.ed.gov/?id=EJ1075221>
- Heng, K. Sol, S. Kaing, & S. Em (Eds.) (2023), *Innovations and challenges in Cambodian education*. Cambodian Education Forum. <https://cefcambodia.com/2023/09/18/blended-learning-the-way-forward-for-cambodian-higher-education-in-the-post-covid-19-pandemic/>
- Henseler, J., Hubona, G. S., & Ray, P. A. (2016). Using PLS path modeling in new technology research: Updated guidelines. *Industrial Management & Data Systems*, 116(1), 2–20. <https://doi.org/10.1108/IMDS-09-2015-0382>
- Kudale, P., & Buktar, R. (2022). Investigation of the impact of augmented reality technology on the interactive teaching and learning process. *International Journal of Virtual and Personal Learning Environments (IJVPLE)*, 12(1), 1–16. <https://doi.org/10.4018/IJVPLE.285594>
- Kumar, N., Kaushal, R. K., Janagal, M., Singh, S., & Khare, A. (2022). Device for facilitating remote interactive lessons. *ECS Transactions*, 107(1), 1–10. <https://doi.org/10.1149/10701.1619ecst>
- Kyrlitsias, C., & Michael-Grigoriou, D. (2022). Social interaction with agents and avatars in immersive virtual environments: A survey. *Frontiers in Virtual Reality*, 2, 1–13. <https://doi.org/10.3389/frvir.2021.786665>
- Lepola, J., Kajamies, A., Laakkonen, E., & Collins, M. F. (2023). Opportunities to talk matter in shared reading: The mediating roles of children's engagement and verbal

- participation in narrative listening comprehension. *Early Education and Development*, 34(8), 1896–1918. <https://doi.org/10.1080/10409289.2023.2188865>
- Li, H. O. Y., Bailey, A., Huynh, D., & Chan, J. (2020). YouTube as a source of information on COVID-19: A pandemic of misinformation? *BMJ global health*, 5(5), 1–6. <https://gh.bmj.com/content/bmjgh/5/5/e002604.full.pdf>
- Mishra, P., Pandey, C. M., Singh, U., Gupta, A., Sahu, C., & Keshri, A. (2019). Descriptive statistics and normality tests for statistical data. *Annals of Cardiac Anaesthesia*, 22(1), 67–72. https://journals.lww.com/aoca/fulltext/2019/22010/descriptive_statistics_and_normality_tests_for.11.aspx
- Mohammed, T. (2022). Designing an Arabic speaking and listening skills e-course: Resources, activities, and students' perceptions. *Electronic Journal of E-Learning*, 20(1), 53–68. <https://doi.org/10.34190/ejel.20.1.2177>
- Nunes, M., Adão, T., Shahrabadi, S., Capela, A., Carneiro, D., Branco, P., ... & Peres, E. (2024). ARPocketLab: A mobile augmented reality system for pedagogic applications. *Computers*, 13(6), 1–28. <https://doi.org/10.3390/computers13060148>
- Parmin, P., Syafi, M. Q., Junaedi, I., Yulianto, A., Purwantoyo, E., & Mubarak, I. (2021). Cultural integration on students' productivity during distance learning. *Jurnal Pendidikan dan Pengajaran*, 54(3), 415–424. <https://doi.org/10.23887/jpp.v54i3.38924>
- Paszke, A., Gross, S., Chintala, S., Chanan, G., Yang, E., DeVito, Z., Lin, Z., Desmaison, A., Antiga, L., & Lerer, A. (2017, October 28). *Automatic differentiation in PyTorch*. NIPS 2017 Workshop on Autodiff. OpenReview. <https://openreview.net/forum?id=BJJsrnfCZ>
- Sabrila, R. A. P., & Apoko, T. W. (2022). The effectiveness of podcasts on listening skills for vocational school students. *IDEAS: Journal on English Language Teaching and Learning, Linguistics and Literature*, 10(2), 1177–1186. <https://doi.org/10.24256/ideas.v10i2.2897>
- Sim, T., & Em, S. (2023). *Blended learning: The way forward for Cambodian higher education in the post-COVID-19 pandemic*. In K. Heng, K. Sol, S. Kaing, & S. Em (Eds.), *Innovations and challenges in Cambodian education* (pp. 37–52). Cambodian Education Forum. <https://cefcambodia.com/books/>
- Szymkowiak, A., Melović, B., Dabić, M., Jeganathan, K., & Kundi, G. S. (2021). Information technology and Gen Z: The role of teachers, the internet, and technology in the education of young people. *Technology in Society*, 65, 1–10. <https://doi.org/10.1016/j.techsoc.2021.101565>
- Tacarroucht, K., Zano, K., & Zamorano, A. (2022). Team games-language learning model in improving students' speaking and listening skills viewed from creativity. *Journal of Language and Literature Studies*, 2(1), 53–61.
- Turner, S. F., Cardinal, L. B., & Burton, R. M. (2017). Research design for mixed methods: A triangulation-based framework and roadmap. *Organizational research methods*, 20(2), 243–267. <https://doi.org/10.1177/1094428115610808>
- Venkatesh, V., Thong, J. Y., & Xu, X. (2012). Consumer acceptance and use of information technology: Extending the unified theory of acceptance and use of technology. *MIS Quarterly*, 36(1), 157–178. <https://doi.org/10.2307/41410412>
- Whalley, B., France, D., Park, J., Mauchline, A., & Welsh, K. (2021). Towards flexible personalized learning and the future educational system in the fourth industrial revolution in the wake of Covid-19. *Higher Education Pedagogies*, 6(1), 79–99. <https://doi.org/10.1080/23752696.2021.1883458>

Exploring the dynamics of politics: An archival examination of definitions, traditions, and cultural influences

Sovanna Huot¹, Chanrithy Chea², Rithy Non³, Ponlue Pok⁴, Sopha Phengly⁵

^{1, 2, 3, 4, 5} University of Delhi, New Delhi, India

Article Info

Article history

Received: November 21, 2024

Revised: February 21, 2025

Accepted: March 12, 2025

Keywords

Archival research

Political culture

Political history

Politics

State tradition

Article type

Research article

Abstract

The meaning of the word politics has been changing through the years; historical experience, cultural norms, and ideological orientations influence the dynamics of change. In this context, this article aims to contribute to the understanding of how such political definitions have been identified, developed, and applied to practice in the realm of governance and civic engagement. To achieve this, through the review of archival materials, primary and secondary historical sources, and political writings, including state documents, this research attempts to identify the key factors that determine how people and society view politics. In particular, this article pays much attention to how state traditions, political ideologies, and cultural factors define these interpretations, which explores and compares diverse political thoughts and their use in explaining the various aspects of governance, public institutions, and political participation. Accordingly, it has employed methodical archival research to analyze political definitions from a variety of historical periods to show how philosophical, institutional, and ideological factors affect the idea of politics and discuss the relevance of these changing definitions to the present political discourse. The findings indicate that political philosophy is dynamic, not static, and the effects of social interactions, political leaders, and historical settings on political philosophy are real. Specifically, the case study of the archive inquiry provides useful findings on how, over time, political narrative has been employed to justify governments and their power structures, as well as the role of the public. Overall, this research makes a great contribution of this research to political science, historical political analysis, and cultural studies, as it presents a systematic review of the political definitions from an archival perspective. Finally, it also highlighted the role of historical political discourse in the formation of contemporary governance and called for further studies on political concepts and state traditions from an interdisciplinary perspective.

This is an open-access article under the [CC BY-SA](#) license.



Corresponding Author:

Sovanna Huot

University of Delhi, New Delhi, India

Email: shuot@polscience.du.ac.in

1. Introduction

Politics is an integral part of the life of social beings, without which their lives are considered impossible, as articulated by Taylor (2021). From the outset, philosophers made significant contributions to the recognition of their real nature and significance, thanks to which the theoretical foundation was laid for the possibility of elaborating the civility that we enjoy today

(Apel, 2023). Moreover, the concept of politics and political activity has long been investigated and debated by various scientists, as this situation has arisen since politics and political activity are complex phenomena that often numb and shine with various indications and expressions (Bareis & Katzenbach, 2021). Consequently, these are the most problematic definitions of politics in the science of political science, which create possible misunderstandings. Importantly, the theoretical and practical difficulties of determining concepts are not only problems of theoretical research but are directly related to practical policies (Cairney, 2021).

In light of this, due to the problems caused by the problematic definitions of political science, the search for an easier and generally available definition of the concept of politics has a distinguished place in contemporary political science literature, as indicated by Rancière (2023). In particular, the search for the most adequate definition of politics creates a wide range of tasks in the different approaches presented to it; understandings of the ancient world are quite interesting on this topic (Baylis, 2020). As emphasized by a growing number of scholars (Barker, 2012; Murphy & Garrard, 2019; Rahe, 1994), according to Plato in the ancient world, ancient sages defined politics as the most important civil affairs and activities. Additionally, Hershkoff and Loffredo's (2022) investigation reveals that political institutions and their legal structure should then settle and solve civil disputes, ensuring the maintenance of order and preventing injustice. Furthermore, as extensively documented in the literature (Linklater, 2020; Yack, 2023), Aristotle, one of Plato's students, in his work *Politics*, understands politics as a higher and wider authority and formulates an institutional structure intended to maintain the relations of people in the *polis*. Indeed, these ancient eminent showed why the issues of the countless ancient societies and examinations in the practice of those issues were of great interest to them. In doing so, they undermined the structure and foundations of their civilization and anticipated the work of future generations in the transcendent transformation of political practices (Holmes, 2024). This ongoing development ensures that political practices do not lose the intended political content. Ultimately, research overwhelmingly suggests that without this scientific approach, policy studies will be slightly different undertakings because they will distance themselves from society and public understanding, losing the political content (Habermas, 2022; Weible et al., 2020).

1.1. Background and rationale

The evolution of political studies and the terminology of global leaders has led to a fundamental and central inquiry: What is politics? Closely related to this is another philosophical probe: What should politics be? Researchers such as Fox (2018) explored this concept, while Paxton et al. (2020) and Toffler (2022) analyzed the nature, structure, and exercise of political power, revealing its far-reaching impact on every aspect of society and its connection to a nation's legal framework. Despite the diversity of definitions of politics in political studies, it is not said directly in official definitions that it is a rule that derives from the nature of the existing regimes or lies in the instinctive nature of the individuals in a society (Halperin & Heath, 2020; Pierre & Peters, 2020). In this regard, various methods provide clarity and make the political power used visible.

Within this framework, Mahatma Gandhi's emphasis on self-reliance and moral values in education has been viewed as a call to assess the significance of politics in empowering individuals and communities. Likewise, Rabindranath Tagore's cosmopolitan approach to education and his focus on nurturing creativity, self-expression, and individualism offer valuable insights into the importance of inclusivity and diversity in political discourse. As Tagore aptly observed and noted, power in all its forms is irrational; it resembles a horse that drags the carriage while blindfolded, and the moral element in this is solely embodied by the

man who drives the horse (Gandhi et al., 1997). This perspective highlights the need for ethical leadership and responsible exercise of authority in politics.

Furthermore, political scholars are crucial in offering solutions for various issues in modern society, as indicated by recent research (Chater & Loewenstein, 2022; Hanson & Sigman, 2021; Head, 2022; Mikac & Wahdyudin, 2021; Nightingale et al., 2019). This scholarly focus aligns with Mahatma Gandhi's emphasis on self-sufficiency and empowering communities, along with Rabindranath Tagore's global perspective on education, emphasizing the significance of inclusive, ethically guided, and innovative approaches to political problem-solving. In addition, these sources (Axford et al., 2005; Wolff, 2023) discuss various perspectives on contemporary organizations, power structures, and interactions in the international system, definitions of peace, and internal political conflicts. Nevertheless, in order to address these inquiries, one must have an understanding of the fundamental question: What is politics? (Davis, 1999; Wasserman & Fullmer, 2023).

1.2. Research objectives

1. To investigate how politics has evolved through archival research, analysing pivotal events, ideologies, and institutions that have shaped society's political landscape.
2. To examine how state tradition and political culture influence the understanding of politics, considering factors like civic engagement, governance, and power dynamics.
3. To determine the crucial factors that shape both societal and individual definitions of politics, including historical, cultural, and social influences.

1.3. Research questions

1. How have politics evolved, and what pivotal events, ideologies, and institutions have shaped the development?
2. How do state tradition and political culture influence political understanding, particularly in civic engagement, government, and power dynamics?
3. What historical, cultural, and social factors shape both societal and individual definitions of politics?

1.4. Scope and limitations

The article aims to address the poor visibility of politics in political theory by interpreting how politics are defined. To achieve this, an elaborated understanding of politics is developed by reviewing definitions and analyses of politics in the *Oxford English Dictionary* about a large set of dictionary definitions and analyses of government, especially during the period from 1783, when the OED's fourth lexicographical source begins, to 1865, as provided free on the internet by Project Gutenberg (Abrams, 1971). In addition, a further analysis was made using the *Online Etymology Dictionary*, from the point of view of the history of the words, their voice, tense, and grammatical form, and the analogy from the root to its derived forms. Specifically, the focus of this article is on how politics are defined in the language because the language, itself the product of bottom-up entrepreneurial action, is the only institution in which definitions can be construed entirely *modus voluntaries* or bottom-up. Therefore, of concern, then, is how political matters are argued about, discussed, thought through, learned, and understood in the first place, conceived, as in the OED, as the abstract consideration of something. It is important to note that the aim of this article is neither to review a political subject nor to provide an account of the evolution of political behavior over time, even though the history of the words is given in the OED etymology.

2. Theoretical framework

There are some fundamental theories related to the definition of politics. Different scholars have expressed different views on the topic. Indeed, almost every school of thought has forwarded its concept of politics according to its perspective. A few prominent examples are discussed below:

(1) To begin with, according to the modern concept, politics is considered a science (Shively & Schultz, 2022). It is the study of laws and examines every aspect of political activity with an emphasis on the technique of dealing with people. The rules for handling, controlling, and manipulating individuals are essential techniques that a statesman must learn to produce the desirable outcomes of political action. At the same time, earlier views of politics still hold relevance. For instance, when Aristotle defined politics, he observed that men are political animals who live together in societies and cannot exist in isolation. Their relationships form a political organization where the government plays a constructive role. In this context, politics is regarded as the supreme science that deals with the highest matters and the highest aim of man, both as an individual and as a member of an organized society (Selznick, 2020).

(2) Furthermore, according to the concept of government-based understanding, politics is essentially about the distribution of power and resources in society, with various definitions emerging from different perspectives, as noted by Sommer and Hargrove (2020). In this regard, Aristotle viewed politics as the conduct of the government toward its citizens. Building on this idea, a well-known political scientist, Harold Lasswell (2013), defined politics as who gets what, when, and how, focusing on the distribution of power and resources. This definition emphasizes who holds power, how decisions are made, and who benefits from those decisions. In addition, other scholars, such as Easton (2024), have explored the authoritative means and political mechanisms that shape a society. According to Easton, politics emerge from decision makers who determine how values are to be allocated. Thus, the definition by Harold Lasswell also aligns with the government-citizen relationship and reflects a broader understanding of political dynamics.

2.1. Conceptualizing politics

Every discipline of knowledge is grounded in organic criteria, including its underlying philosophy and methodology (Benton & Craib, 2023). As emphasized by an increasing number of scholars (Orr et al., 2020; Razavi et al., 2021), the foundation of any discipline involves key components: the problems it investigates, the research methods it employs, the objectives it pursues, the core concepts it holds, and the interrelationships between those concepts. In essence, disciplines evolve through the conceptualization and interpretation of these relationships. According to Borsboom et al. (2021) and Sandberg and Alvesson (2020), when a discipline organizes itself around certain concepts, it simultaneously shapes its philosophy and methodology. Consequently, any inquiry into its philosophy and methodology raises questions about all aspects of the discipline itself.

Moreover, the concepts within a discipline are defined based on internal investigations and scholarly inquiry. These include the discipline's aims, the domains it operates in, the types of behavior it examines, the techniques it utilizes, and the reasoning models it applies. Since definitions are influenced by distinct philosophical and methodological orientations, and as each approach embodies unique characteristics, no concept can be regarded as universally fixed or exact (Williams, 2021). Therefore, it is essential to analyze and clarify the concepts of each discipline to properly establish its theoretical foundation.

In the context of this study, which investigates the concept of politics, definitions have been drawn from the field of sociology (Dahinden et al., 2020). Methodologically, document analysis was employed, with archival research serving as the primary technique. To determine whether sociological concepts are external impositions or products of the society under investigation, it is useful to analyze how these concepts are defined. Archival research relies on credible sources, including books, newspapers, magazines, photographs, and documents produced by various institutions and individuals. Furthermore, archives and libraries from other social science domains may also be treated as valid archival sources.

As McLeod and Connor (2022) explained, archives reflect a society's products, services, cultural norms, political tendencies, technological developments, demographic patterns, and self-conceptions. They document societal challenges and perspectives, encompassing diverse elements of cultural history and heritage across graphic, written, oral, cinematic, and photographic formats as indicated in Table 1.

Table 1. Overview of political definitions and theories

Political theory	Key figures	Definition and impact
Traditional political theory	Aristotle and Plato	Emphasizes justice, government, and the ideal state.
Theory of the social contract	Rousseau, Hobbes, and Locke	Uses a fictitious contract to illustrate the validity of governmental power.
Marxist thought	Friedrich Engels and Karl Marx	Examines capitalism, class conflict, and the state's function in social institutions.
Contemporary political theory	Schmitt, Rawls, and Weber	Examines political legitimacy, power relations, and democracy in modern settings.

2.2. Key perspectives in defining politics

Given that this research investigates manifest expressions before drafting items with latent or non-obvious political indicators, it becomes clear that the definition of politics provided by the United Nations Educational, Scientific, and Cultural Organization (UNESCO) is particularly useful, as emphasized by Debarbieux et al. (2021) and Matasci (2020). A significant advantage of the UNESCO approach lies in its broader conceptual framing, especially as only a limited number of specialized dictionaries offer historical etymologies or explore the nuanced meaning of terms such as native citizens. Consequently, UNESCO's inclusive definition offers a more expansive interpretive lens.

Notably, several major American political science textbooks also adopt similar frameworks, albeit with slight modifications. This convergence suggests a disciplinary shift toward understanding politics not only in terms of governance structures or electoral processes but also through broader social, cultural, and epistemic lenses. In this context, the study demonstrates the value of assembling a multi-domain database of political artifacts accumulated across different historical and disciplinary trajectories.

The Oxford English Dictionary provides comprehensive etymological insight into the term *politics*, including its linguistic origins, evolving meanings, and contextual applications. Definitions now typically encompass practical aspects of political practice, material attributes of political systems, and the associated social rights and obligations of citizenship (Haig, 2020; Honig, 2023).

This expanding conceptual landscape invites deeper inquiry: *Can the non-political ever become political?* Is politics always confined to formalized domains such as elections or state governance? What phenomena lie outside the realm of politics, if any? For instance, is the killing of a spider political? What about the entrance or withdrawal of a predator during the process of discovery?

Such questions challenge static definitions and point to the blurred and often contested boundaries between the political and the non-political. They invite us to consider whether politics is less about the domain in which an act occurs and more about the power relations, symbolic meanings, and implications for agency and structure embedded within the act itself.

2.3. Historical evolution of political definitions

Politics as a concept can be traced back to ancient civilizations. While it is commonly asserted that politics originated in ancient Greece, particularly in Athens, where the earliest known form of democracy was practiced among citizens, other scholars argue that its origins may lie even earlier, in ancient Mesopotamia and India (Hedges, 2021). In ancient Greece, philosophers such as Socrates, Plato, and Aristotle articulated their political ideas, with Aristotle's *Politics* remaining a foundational text. However, the political insights of many early philosophers, theologians, and revolutionaries are not always systematically presented in their writings.

Studies have shown that Mesopotamian and Indian civilizations played influential roles in the formation of political thought. Unfortunately, these contributions are often overlooked in favor of Western traditions (Koukounaras, 2022; Tridimas, 2021). Even within Greek political thought, the significant religious and traditional influences are frequently neglected by political theorists. Understanding the historical evolution of politics is vital to comprehending the complexity and diversity of the concept. By tracing its development across various societies and civilizations, we can better grasp the forces that continue to shape modern political ideologies, institutions, and behaviors.

Despite the existence of a few scholarly works that recognize the pre-Greek origins of political thought, many fail to trace definitions or frameworks across time or to draw connections between these early ideas and contemporary political theory or practice (Govigli et al., 2021). As a result, definitions of politics remain highly contested and fragmented, shaped by disciplines, historical periods, and ideological orientations. While current debates are often well-informed and sophisticated, they tend to exclude earlier, non-Western traditions or treat them as peripheral to the main discourse.

This lack of inclusive historical continuity has left the concept of politics vulnerable to definitional instability. Earlier definitions often set high philosophical and normative benchmarks, yet their underlying assumptions vary significantly across time. Contemporary political thought, in turn, continues to grapple with the challenge of defining politics in ways that are both inclusive and context-sensitive (Kitromilides & Tsoukalas, 2021). Consequently, politics, as both a practice and a field of inquiry, remains elusive. Its definition is persistently contested, shaped by embedded cultural, ideological, and disciplinary frameworks that resist

simplification and attempts to decisively isolate the political from the non-political, as shown in Table 2.

Table 2. Important political customs and their cultural impact

Political tradition	Region	Political and cultural influence
Confucianism	East Asia, China	emphasizes meritocracy, ethical leadership, and hierarchical government.
Liberalism in the West	North Africa and the Middle East	combines political and legal institutions with religious beliefs.
Western Liberalism	North America and Europe	encourages free markets, democracy, and individual rights.
Native American Administration	Different areas	emphasizes conventional leadership systems, sustainability, and group decision-making.

3. Methodology

The authors adopted an archival research design, utilizing secondary sources alongside qualitative content analysis to explore the historical development of politics within society. This methodological approach allows for an in-depth examination of the complex evolution of political ideas and practices. The framework draws upon the methodological guidance of established scholars such as Clark and Creswell (2008), Creswell (2021), and Creswell et al. (2004). Furthermore, the study is informed by Frisch and Kelly's (2012) influential work, *Political Science and the Archives*, featured in *Doing Archival Research in Political Science* (Amherst Press), which provides essential strategies and considerations for archival inquiry in the field of political science.

The archival corpus compiled for this study includes a wide array of textual materials, not limited to private diaries and journals, but also encompassing inventories, estate plans, daybooks, and letter remittances. The authors of these documents represent diverse social and professional backgrounds, including planters, absentee landowner representatives, estate managers (both active and retired), estate solicitors, and even enslaved individuals. This diversity of authorship is a notable strength, as it enables a broader and more nuanced understanding of historical language use and political meaning.

As Duranti (2009) emphasizes, Contextualized Referential Semantics (CRS) provides a valuable strategy for ensuring that entries in the corpus reflect potential variations in language usage across social classes, age groups, professions, and historical periods. Although the corpus is limited to English-language texts to maintain methodological consistency, it is important to recognize that multiple languages were in active use in British Caribbean plantation societies. These linguistic interactions likely influenced the contextual meanings conveyed in English-language texts, and their impact will be addressed in the subsequent sections of the study, as depicted in Table 3.

Table 3. Archival sources in political research

Source Type	Example	Significance
Records of the government	Treaties and legislative documents	provides authoritative records of governance and policy choices.
Historical records	Memoirs, letters, and diaries	provides individual viewpoints on political leaders and events.
Archives of media	Political broadcasts and newspapers	monitors political events and public opinion throughout time.
Scholarly works	Books and journals	examines and evaluates governance forms, political ideas, and ideologies.

3.1. Authenticity and reliability

As historical documents are evidence of the past, fundamental principles are, therefore, to guarantee and prove the authenticity and reliability of the document in all studies concerned with the collection and documentation of these types of historical sources. Specifically, authenticity is a guarantee and proof that the document is what it says it is and was written or produced as claimed. In contrast, reliability is the determination of a source document that refers accurately and truthfully. However, for long documents, this process is very difficult, and, for that reason, it is possible to consider documents, particularly those in the public archive, as authentic in case they have not been tampered with too much, which means that the process to maintain authenticity and reliability is generally to maintain the archive. In this regard, in the context of the document, authenticity is the guarantee that a certain document is the authentic document that it claims to be. Moreover, in the digital sense, the term authenticity refers to the assurance that electronic records are what they purport to be and have not been intentionally altered. Whereas analog authenticity encompasses the documents, the paper, ink, printer or typewriter, author's signature, and other aspects, by contrast, electronic authenticity is associated with more complex tasks like the origin of the document, the chain of custody, the technical processes and/or system used to create and handle the document over time, and the ability of the document to be explicitly presented in the way that the author originally presented it.

4. Case studies in political definitions

This section critically examines varied definitions of politics over time, drawing upon foundational works such as those by Bodin and Tooley (1955). In the latter part of their seminal text, *The Six Books of a Commonwealth*, Bodin and Tooley argue that politics is the supreme science, combining theoretical ideals with practical governance skills. This perspective, in turn, underscores the dual nature of politics as both a philosophical reflection and a tool for societal management (Sabine & Thorson, 2018). Furthermore, these thinkers emphasize that an effective sovereign must possess extensive knowledge across disciplines, including law, economics, and social theory, to navigate and balance societal interests effectively (Skinner, 1978). Consequently, this approach reveals the depth of intellectual preparation needed for wise governance.

4.1. Historical perspectives

Often regarded as the father of political science in Western thought, the Greek philosopher Aristotle provided a foundational yet broad definition of politics. In his seminal work *Politics*, Aristotle explored not only the nature of the state but also essential social structures such as households, families, and constitutions, alongside matters of legal propriety. Importantly, he viewed the state as embodying significant moral and spiritual purposes, emphasizing its role in shaping an organized and ethical society. By positing that humans are inherently political animals, Aristotle suggested that social and political engagement is a fundamental part of human nature, wherein individuals naturally seek communal life within a structured polity.

Centuries later, Hobbes (1999) revisited this notion of humanity's political inclination, though with a markedly different outlook. Through his concept of the state of nature, Hobbes presented a pessimistic view, arguing that in a world without a central authority, individuals would act primarily out of self-preservation, leading to a war of everyone against everyone. According to him, this state of perpetual conflict would necessitate the establishment of a sovereign power to provide security and social order. Thus, Hobbes's interpretation underscored the role of the state as a mediator of limited resources, a safeguard against human conflict driven by competition and survival instincts.

Building on this, Green's work (1993) further contributed to political theory by introducing the concept of a two-phase international society, emphasizing the importance of an organized state structure to protect the lives and property of citizens. In his view, the state's primary function was to maintain peace and security among its citizens, who, in the absence of universal political rules, might otherwise disrupt social harmony. Similarly, Holsti (1996) argued that states and systems lack the inherent ability to establish stable, cooperative relations without a neutral, overarching authority. As a result, such a lack leads to inherent instability in the state of nature, where political order is precarious and subject to the unpredictability of power dynamics.

Reinforcing this, Hobbes's notion of the state of nature highlights the intrinsic conflicts that arise in the absence of a centralized power. He maintained that limited resources and inherent self-interest inevitably drive humans into conflict, necessitating a governing body to impose order. Ultimately, this emphasis on the relationship between authority and conflict resolution reflects his belief that political systems are essential in transforming the chaotic tendencies of human nature into a structured, stable society.

4.2. Contemporary applications

A close examination of historical works reveals the evolving meanings of politics and state, shedding light on how these concepts have shaped societal structures and governance over time (Finer, 1997). By tracing these definitions through historical narratives, we can draw parallels to contemporary political issues. For instance, Melko (2008) provides a holistic perspective on the evolution of political thought, illustrating how foundational ideas continue to inform modern interpretations. An illustrative example in an anthology recounts a story where a young child cares for a sick calf, feeling a deep sense of joy from nurturing it back to health (Evans-Pritchard, 1940). In contrast, an elderly individual reflects on their sadness upon being denied the right to slaughter the calf by an authority figure, here, the child's father.

At first glance, this seemingly simple story, set in an ancient society on the threshold of becoming one of the first historical civilizations, hints at complex power dynamics and societal roles. More specifically, the context indicates that such individuals, positioned as future high-

ranking priests, experienced both privilege and restriction, with their distress symbolizing a renunciation of worldly desires (Claessen & Skalník, 1978). In essence, the narrative reflects the societal expectations of their role as intermediaries between the divine and the secular world, a function requiring self-discipline and sacrifice (Eisenstadt, 1993).

Thus, this story not only captures the tensions between personal desire and communal responsibility but also exemplifies the broader educational practices that were central to early political development. By cross-referencing historical accounts from both Eastern and Western traditions, we find evidence of similar rites and educational experiences that formed the foundation of early political systems (Geertz, 1980). Ultimately, these stories underscore the role of social and moral training in shaping individuals who would lead and guide society, reinforcing the understanding of politics as both a practical and a symbolic mediator of power, ethics, and communal duty.

5. Analyzing and interpreting data

While a comprehensive examination of the conservative-liberal dichotomy and its effectiveness in explaining the diversity of global political systems falls beyond the scope of this article, the dichotomy nevertheless remains a valuable heuristic framework for tracking shifts in core beliefs and assumptions within these ideologies over time (Gerring, 1998). Specifically, this binary approach helps scholars trace the evolution of conservative and liberal thought, noting how each tradition adapts to historical changes and sociopolitical pressures (Carter, 1954). By analyzing primary sources, we can identify key distinctions between conservative and liberal ideologies, where historical context significantly influences their respective foundational beliefs (O'Sullivan, 1976).

For instance, conservative thought generally emphasizes preserving tradition, authority, and stability, whereas liberalism advocates for individual rights, reform, and equality. These contrasting ideologies reflect diverse societal values and priorities, each adapted to the specific historical and cultural circumstances of different nations. As such, given the wide variety of global political systems, the flexibility of conservative and liberal approaches allows them to address distinct social and political challenges, making these ideologies relevant across a broad spectrum of political contexts (Lipset, 2003).

Moreover, the selected definitions and concepts within these ideologies also play a pivotal role in shaping policy frameworks and decision-making processes. Indeed, the defining concepts of a political party, whether rooted in conservative or liberal thought, set the tone for its policy choices and strategic goals, influencing both domestic and international agendas (Schumpeter, 1976).

Ultimately, the policymaking process within any political party is shaped by its guiding ideological principles, which act as a foundational lens for interpreting issues and formulating responses (Weber, 2009). Thus, the conservative-liberal dichotomy not only informs ideological discourse but also serves as a fundamental driver of practical governance, guiding the application of political ideals within real-world contexts.

5.1. Coding and categorization

To capture the nuanced distinctions in definitions of political concepts, we employ a rigorous content analysis, focusing on key terminology to create clear, structured definitions. In doing so, this approach highlights the interdisciplinary nature of political science, drawing from

diverse perspectives across philosophy, sociology, and political theory (Bauer & Gaskell, 2000; Tichenor & Sridhar, 2019). To this end, to develop a comprehensive typology of political definitions, we follow a structured, four-step conceptual framework adapted from Tichenor's methodological approach.

1. **Literature collection and theoretical deliberation:** First, we collect a broad range of scholarly articles where authors engage in discussions about the fundamental essence of politics. These articles often contain implicit or explicit theoretical definitions, providing insight into how different schools of thought approach the subject. This step establishes a foundational perspective by including varied interpretations of politics and capturing the diversity of scholarly discourse (Schreier, 2012).
2. **Systematic identification of core definitions:** Next, we use qualitative research techniques to systematically identify explicit definitions of politics from a curated selection of introductory textbooks and leading political science journals. This selection includes seminal works from top academic institutions and influential authors in the field, such as Aristotle, Bodin, and Taylor, whose foundational theories have shaped political discourse over centuries (Bodin & Tooley, 1955; Taylor, 2021; Terchek & Moore, 2000). To ensure the accuracy and relevance of our sources, we focus on definitions provided in the opening sections of the texts, where foundational concepts are typically outlined. By cross-referencing multiple editions and confirming unique listings of authors, we avoid duplication and ensure the completeness of our analysis (Cresswell, 2013).
3. **Comparative analysis of conceptual variations:** To understand the extent of variation among definitions, we conduct a comparative qualitative content analysis. Each definition is analysed for its underlying ontological and epistemological assumptions, such as whether politics is framed as an institutional structure, a human interaction process, or an ethical construct. This analysis enables us to identify patterns, distinctions, and recurring themes within each perspective, establishing a comparative framework that links definitions to broader theoretical underpinnings (Patton, 2014).
4. **Constructing a typology of political definitions:** Finally, we synthesize these insights into a typology that categorizes political definitions according to their conceptual foundations. This typology offers a structured and comprehensive framework that can be used to analyse political language and discourse across different academic disciplines. The resulting framework provides a clearer understanding of how definitions of politics have evolved, serving as a basis for future research and comparative studies within the social sciences (Saldaña, 2021).

This methodological approach not only clarifies the subtle differences in political terminology but also serves to bridge perspectives from various disciplines, reinforcing the interdisciplinary relevance of political studies.

5.2. Thematic analysis

Braun and Clarke (2021) described thematic analysis as a versatile and theoretically flexible approach, well-suited for research that seeks to identify patterns and themes within qualitative data. Importantly, their method accommodates various epistemological stances, making it ideal for examining the evolution of political definitions over time, as thematic analysis can capture both explicit content and underlying meanings.

Similarly, Fereday and Muir-Cochrane (2006) endorse an inductive, sense-building approach in thematic analysis, where themes are generated directly from data, such as interview transcripts. Their emphasis on an organic coding process allows the data to reveal structures and meanings. As such, this approach is valuable for the present research, as it facilitates a thorough exploration of the shifts in political definitions by letting recurrent ideas and discourses emerge naturally from the data.

In addition, Smith (2024) highlights the importance of initial categorization during the coding process, recommending that researchers begin by coding each piece of data to create preliminary categories. This first stage of open coding lays the groundwork for a structured analysis, where the researcher identifies core themes before moving to more specific categorizations. Furthermore, many thematic analysts recommend employing multiple coders during this stage to enhance the reliability and validity of the analysis, as diverse perspectives can strengthen the analytic process (Guest et al., 2012).

Although some differences exist in the approaches advocated by Cresswell (2013) and Smith (2024), the actual analysis process remains largely consistent across both methods, involving six stages. These stages typically begin with data preparation, including transcribing, re-reading, and reviewing the interview recordings, steps that align with Knoblauch's (2005) suggestion for familiarizing oneself deeply with the data. Such immersion fosters a more profound understanding of the material, essential for capturing the nuanced shifts in political terminology.

Once familiarity with the data is established, themes are generated by a systematic process of identifying and labelling concepts within responses, called coding. This process involves a detailed and structured approach, which includes line-by-line coding to enable the researcher to capture fine-grained details. As Smith (2024) notes, line-by-line coding is an important part of the qualitative analysis as it allows for stratifying the data into more manageable units and looking for patterns in the details.

By integrating these steps, thematic analysis becomes a robust tool for examining how definitions of politics have changed across decades. Ultimately, this layered approach allows for a comprehensive and theoretically grounded analysis, suitable for understanding both the explicit and latent content within complex qualitative data.

6. Discussion and implications

This study examines the dynamic evolution of political definitions, tracing how societal conceptions of politics have transformed across historical eras. Through comprehensive archival research, we identify key events, ideologies, and institutions that have collectively shaped the political landscape. Notably, our findings reveal that the interplay between state tradition, political culture, and individual perspectives plays a crucial role in shaping contemporary understandings of politics, with implications for both civic engagement and governance. Consequently, this evolving understanding underscores the significance of context in political thought, highlighting how definitions of politics are melded by historical, cultural, and social factors.

Moreover, diverse interpretations of politics emerge from scholars in various disciplines, including political scientists, legal theorists, and philosophers. Although a consensus exists around the notion of politics as a pursuit of social power, distinct viewpoints emphasize different facets of political activity. For instance, Robert Dahl's influential work conceptualizes

politics as both science and art, focusing on the intricate power dynamics within states. This dual characterization reflects the complexity of politics, as it encompasses both systematic analysis and the strategic maneuvering inherent in governance. Thus, the lack of a single, unified definition of politics speaks to its multifaceted nature; politics is a field where the exercise of power intersects with ethical, cultural, and social dimensions (Dahl, 2020).

In light of this complexity, scholars must integrate the dispersed knowledge across various fields, delineating both the subjects and objects of political inquiry. Such integration, in turn, would allow political science to bridge theoretical insights with practical applications, enhancing the discipline's relevance to real-world issues. Accordingly, our research contributes to this synthesis, illuminating the intricate, ever-evolving nature of politics. By capturing the diversity of political definitions and contexts, we aim to foster a nuanced understanding of political theory that resonates across disciplines.

For those seeking further insights, historical archives and comprehensive scholarly analyses provide invaluable resources for tracing the conceptual evolution of politics. Engaging with these sources allows researchers to uncover the shifting definitions and core principles that continue to shape the political domain today. Furthermore, supplementing archival research with contemporary sources and expert analyses further enriches the understanding of politics, offering a holistic view of its role in society and governance.

6.1. Synthesizing findings

This research seeks to move beyond merely defining the concept of politics, aiming instead to explore and clarify the diverse interpretations that have emerged over time. Rather than offering a single, fixed definition, our objective is to establish a semantic framework that allows for a nuanced understanding of politics. In doing so, this framework provides readers with the tools to analyze, contextualize, and integrate various theoretical perspectives, ultimately fostering the ability to generate new insights within political discourse. Importantly, this stage represents the core of our humanities-oriented approach, where meaning, reasoning, and conceptual creativity converge.

To organize our findings, each conceptual aspect was presented as an independent subtopic that could be analyzed in its own right. This strategy avoids redundancy and ensures that each topic area is addressed in alignment with the intensity of the findings. Through our analysis of sixteen key articles, we identified 45 distinct definitions of politics proposed by political scientists, philosophers, and sociologists. These definitions were then categorized into four main thematic groups, each associated with specific theoretical frameworks and historical contexts. By compiling definitions from different historical periods, we sought to illustrate the continuity and transformation of political concepts over time.

Notably, many definitions incorporate themes such as authority, the state, governance, power, and collective organization, which are central to the concept of politics. Moreover, our findings indicate that political definitions often include references to elements like order, dissent, theoretical inquiry, decision-making processes, resource allocation, optimization of societal interests, problem-solving, public interest, and the common good. Together, these components represent fundamental aspects of politics as a discipline and practice. Consequently, they form a comprehensive framework for understanding politics as a complex, multi-dimensional process.

The management of these elements, both within and beyond state borders, involves intricate relationships between internal and external political entities. Within this structure, policymakers, legislators, and governing bodies serve as mediators, balancing the interests of communities and state power. As such, this research categorizes these functions and roles under the overarching concept of politics and briefly addresses how they relate to specific subfields within political science.

By presenting this structured approach, we provide a lens through which to interpret political definitions about broader theoretical and contextual factors. Ultimately, this framework not only enhances our understanding of politics but also supports further research that examines the evolving nature of political thought across different contexts and periods.

6.2. Theoretical contributions

This study's primary theoretical contribution lies in its advancement of political theory, particularly in exploring the fundamental nature and organizational structure of politics. As articulated by Easton (1968), political theory seeks to uncover the essence of politics and how political concepts and processes are systematically organized. In this view, political theory can be understood as an evolving body of knowledge aimed at constructing an organized framework of truth. Within this framework, two primary decisions emerge: explicit decisions concerning the inherent nature of politics and implicit decisions regarding the appropriate focus of political inquiry. Therefore, political theory engages with profound, foundational questions about the nature of politics itself and organizes these questions to uncover core meanings and purposes.

Building upon this, Burgess (2019) further categorizes the definitions of politics into two distinct realms: as a matter of state and as a universal human activity. This analytical distinction helps to clarify the dual role of politics in society, recognizing it both as a formalized system and as a broader, intrinsic aspect of human life. Specifically, the matter of state perspective refers to the public, institutionalized political processes through which authoritative decisions that affect society are made. This includes government structures, formal institutions, and procedural relationships expressed through societal, economic, and ethical rules. In this sense, politics manifests as the authoritative actions of a sovereign state, involving public institutions, policymaking, and the delivery of services that directly impact society.

Conversely, viewing politics as a universal human activity broadens its scope beyond institutional frameworks, positioning it as an intrinsic element of human cooperation, belief systems, and social interactions. From this standpoint, politics transcends formal state structures, representing a deeply embedded aspect of human experience. Thus, political activity is not solely tied to government but is instead a manifestation of human collaboration and conflict resolution, rooted in shared values and collective goals. In this broader conception, politics is interwoven with aspects of life, ethics, and wisdom, making it an inseparable facet of human existence.

By examining and integrating these dual dimensions, this study contributes to political theory by suggesting that politics cannot be wholly encapsulated within state-centered definitions alone. Rather, by acknowledging both institutionalized processes and the universal aspects of political engagement, this research proposes a more holistic understanding of politics. Ultimately, such an understanding reinforces the idea that politics is not only a function of governance but also an essential expression of social organization and human interaction, transcending formal boundaries and existing wherever there is human life.

7. Conclusion

This study reviews and examines key definitions of politics, drawing on the research values and approaches of prominent scholars such as H.D. Lasswell, David Easton, and Harold Lasswell. Through an analysis rooted in secondary sources, this research explores how politics has been defined within varying theoretical frameworks and objectives, providing illustrative examples that underscore the diversity of perspectives in the field. As a result, the findings highlight the critical role that these scholars' contributions have played in shaping political science literature, offering insights valuable to researchers, students, and readers alike.

One central aim of this study is to demonstrate that the essence of political inquiry cannot be fully captured by any single attribute of politics. Instead, it is found within a constellation of elements, social power, governance, public interest, conflict, and cooperation, that appear in different combinations and magnitudes across diverse contexts. These elements, however, do not neatly fit into rigid categories but are best understood in a dynamic, flexible framework that reflects the inherent complexity of political life. Moreover, a noted limitation of traditional descriptive lists of political attributes is their occasional lack of reference to conflict and their focus on group consensus, which may overlook the underlying tensions and disagreements that are also essential aspects of politics. For a more holistic understanding, political definitions must include analytical depth, focusing not only on collective interests but also on the inherent conflicts and power dynamics within societies.

In this regard, discussing politics is essential, even if achieving a consensus on its definition proves challenging. The field must, therefore, embrace diverse and often conflicting perspectives, maintaining tolerance for disparate opinions without necessarily endorsing all views. Unlike other sciences, politics resists neutrality and abstention. While sciences such as physics or chemistry may operate with objective detachment, politics is deeply embedded in human action and social structures, making it difficult to remain apolitical. Indeed, it permeates both individual behavior and collective actions, carrying significant consequences. Thus, politics is omnipresent, an inescapable facet of social life.

In line with this, the notion of zero politics is, in essence, a theoretical abstraction, akin to discussing nature or human essence. For example, the Greek term *politikos*, which implies an engaged citizenry, underscores the idea that being political is intrinsic to human social existence. Even as early as the work of Meleager of Gadara, who edited the anthology *Apophoreta*, there was an acknowledgment that to participate in society is to engage in politics. In conclusion, this study highlights the enduring relevance of politics and the importance of a broad, inclusive approach to understanding its role in shaping human interaction and governance.

7.1. Summary of key findings

After establishing definitions of political science and politics, this study then explores the perspectives of prominent thinkers on these concepts. Rather than merely providing tautological definitions, the primary purpose of this work is to delve into the substantive aspects of political science and politics, examining what these concepts encompass and how they interrelate. Consequently, this study incorporates the views of influential philosophers such as Socrates, Plato, Aristotle, and the Sophists, figures often associated with early inquiries into political and ethical norms. Their perspectives are included to highlight foundational methodological questions relevant to both research and education, which may be overlooked in introductory-level textbooks.

As a modern academic discipline, political science has evolved through the application of objective scientific methods, including observation, analysis, and induction. In this regard, the discipline aims to systematically investigate, understand, and categorize the principles that govern political structures and behaviors within human societies. This scientific approach has involved the gradual refinement of theoretical data and the collection of empirical findings across various subfields, establishing a framework within which political phenomena can be studied systematically. Thus, the essential objective of political science is to analyse, interpret, and organize the guiding principles and rules that shape political institutions and social governance. By employing rigorous scientific methods, political science seeks to elucidate the norms and behaviors that underpin institutions, providing a basis for understanding how these structures influence human interactions within a society.

In addition, political science has gained substantial significance in modern society by examining the elements that constitute political systems, drawing comparisons across different systems, and establishing conceptual classifications that aid in understanding political organization. Through these processes of scrutiny, comparison, and conceptualization, political science not only contributes to the academic understanding of governance but also plays a crucial role in supporting the development and cohesion of political communities. By evaluating and defining the principles that contribute to national unity and effective governance, political science aids societies in creating frameworks for stability, equity, and the promotion of the public good.

7.2. Future research directions

Future research should aim to test whether the interrelationships among the variables identified in this study remain consistent under conditions of spontaneous preferences or emergent dilemmas. For example, preferences among the British elite may have existed independently of regulatory frameworks, whereas similar preferences among French, German, and Russian elites likely evolved in response to different contextual pressures. In addition, the notion of state security might have activated these elite preferences selectively, highlighting the influence of external threats or perceived vulnerabilities on elite decision-making processes.

This line of inquiry opens a range of theoretical and empirical questions. One important consideration is whether testing spontaneous preferences within political elites could foster greater realism in theorizing, by capturing more nuanced, situational responses. Alternatively, could such preferences be effectively analyzed without introducing additional dimensions, such as European Security Operations Centre mapping? Investigating whether elite preferences reflect crisis management strategies or arise as security paradoxes could deepen our understanding of elite behaviors in politically volatile settings.

Moreover, it would be valuable to examine whether these so-called security paradoxes were addressed simply by establishing the ESOC's precautionary role or if the institution evolved in response to more complex security dynamics. To answer these questions effectively, future research should leverage archival data, ensuring that the natural order or the situation before regulatory interventions is considered. Archival research would provide the necessary historical context to understand how elite preferences and behaviors have shifted over time, offering insights into the durability of these relationships under varying conditions of stability and threat.

Acknowledgments

The authors would like to express their deepest gratitude to blind reviewers and the editorial team of CJESS for making this article appear in the scholarly world. Without their contributions, this article would not have appeared in academic circles. Therefore, their contributions are considered irreplaceable and helpful for the whole society, especially the scholarly society of research and publication.

Conflict of interest

No potential conflict of interest was reported by the authors.

Funding

The authors received no financial support for the study, authorship, and/or publication of this article.

Declaration of AI usage

The authors used ChatGPT and QuillBot to polish the language in some parts of the article. However, they declared that the content of the article is totally theirs.

References

- Abrams, M. H. (1971). *A glossary of literary terms*. Cengage.
<https://cir.nii.ac.jp/crid/1130282269915416320>
- Apel, K. O. (2023). *Towards a transformation of philosophy*. Routledge.
<https://doi.org/10.4324/9781003448921>
- Axford, B., Browne, V., Huggins, R., & Isaacs, R. (2005). *Politics: An introduction*. Routledge. <https://doi.org/10.4324/9780203978252>
- Bareis, J., & Katzenbach, C. (2021). Talking AI into being: The narratives and imaginaries of national AI strategies and their performative politics. *Science, Technology, & Human Values*, 47(5), 855–881. <https://doi.org/10.1177/01622439211030007>
- Barker, E. (2012). *The political thought of Plato and Aristotle*. Courier Corporation.
<https://philpapers.org/rec/BARTPT-2>
- Bauer, M. W., & Gaskell, G. (2000). *Qualitative researching with text, image and sound: A practical handbook for social research*. Sage. <http://www.sagepub.co.uk/>
- Baylis, J. (2020). *The globalization of world politics: An introduction to international relations*. Oxford University Press. <https://cir.nii.ac.jp/crid/1130000798355526784>
- Benton, T., & Craib, I. (2023). *Philosophy of social science: The philosophical foundations of social thought*. Bloomsbury Publishing.
<https://cir.nii.ac.jp/crid/1130015398815010723>
- Bodin, J., & Tooley, M. (1955). *Six books of the commonwealth*. Blackwell Oxford.
https://www.yorku.ca/comninel/courses/3020pdf/six_books.pdf
- Borsboom, D., van der Maas, H. L. J., Dalege, J., Kievit, R. A., & Haig, B. D. (2021). Theory construction methodology: A practical framework for building theories in psychology. *Perspect Psychol Sciences*, 16(4), 756–766.
<https://doi.org/10.1177/1745691620969647>
- Braun, V., & Clarke, V. (2021). *Thematic analysis: A practical guide*. Sage.
<https://doi.org/10.1080/13642537.2024.2391666>

- Burgess, J. W. (2019). *The foundations of political science*. Columbia University Press.
<https://doi.org/10.7312/burg93494>
- Cairney, P. (2021). Policy analysis as systems thinking. In P. Cairney (Ed.), *The politics of policy analysis* (pp. 129–137). Palgrave Macmillan. https://doi.org/10.1007/978-3-030-66122-9_11
- Carter, B. E. (1954). The conservative mind, by Russell Kirk. *Indiana Law Journal*, 29(2), 307–314. <https://core.ac.uk/download/pdf/232651198.pdf>
- Chater, N., & Loewenstein, G. (2022). The i-frame and the s-frame: How focusing on individual-level solutions has led behavioral public policy astray. *Behavioral and Brain Sciences*, 46, 1–63. <https://doi.org/10.1017/S0140525X22002023>
- Claessen, H. J., & Skalník, P. (1978). *The early state*. Mouton Publishers.
https://api.pageplace.de/preview/DT0400.9783110813326_A19977465/preview-9783110813326_A19977465.pdf
- Clark, V. L. P., & Creswell, J. W. (2008). *The mixed methods reader*. Sage Publications.
<https://cir.nii.ac.jp/crid/1130000793961434112>
- Cresswell, J. (2013). *Qualitative inquiry & research design: Choosing among five approaches* (3rd ed.). Sage Publications.
- Creswell, J. W. (2021). *A concise introduction to mixed methods research*. Sage Publications.
<https://cir.nii.ac.jp/crid/1130008586403648403>
- Creswell, J. W., Fetters, M. D., & Ivankova, N. V. (2004). Designing a mixed methods study in primary care. *The Annals of Family Medicine*, 2(1), 7–12.
<https://doi.org/10.1370/afm.104>
- Dahinden, J., Fischer, C., & Menet, J. (2020). Knowledge production, reflexivity, and the use of categories in migration studies: Tackling challenges in the field. *Ethnic and Racial Studies*, 44(4), 535–554. <https://doi.org/10.1080/01419870.2020.1752926>
- Dahl, R. A. (2020). *On democracy*. Yale University Press.
<https://cir.nii.ac.jp/crid/1130282269274782080>
- Davis, N. Y. (1999). What is transversal politics? *Soundings*, 12, 94–98.
https://autonomorganising.noblogs.org/files/2015/12/davis_transversal-politics.pdf
- Debarbieux, B., Bortolotto, C., Munz, H., & Raziano, C. (2021). Sharing heritage? Politics and territoriality in UNESCO's heritage lists. *Territory, Politics, Governance*, 11(3), 608–624. <https://doi.org/10.1080/21622671.2020.1854112>
- Duranti, A. (2009). History, ideas, and issues in linguistic anthropology. In A. Duranti (Ed.), *Linguistic anthropology: A reader* (2nd ed., pp. 1–59). Wiley-Blackwell.
<https://www.sscnet.ucla.edu/anthro/faculty/duranti/reprints/Duranti2001LinguisticAnthropologyHistory.pdf>
- Easton, D. (1968). A systems analysis of political life. In W. Buckley (Ed.), *Systems research for behavioral science* (pp. 428–436). Routledge.
<https://doi.org/10.4324/9781315130569>
- Easton, D. (2024). *The analysis of political structure*. Taylor & Francis.
<https://doi.org/10.4324/9781003545798>
- Eisenstadt, S. N. (1993). *The political systems of empires*. Routledge.
<https://doi.org/10.4324/9781315133911>
- Evans-Pritchard, E. E. (1940). *The Nuer: A description of the modes of livelihood and political institutions of a Nilotic people*. Clarendon Press.
<https://ehrafworldcultures.yale.edu/cultures/fj22/documents/001>
- Fereday, J., & Muir-Cochrane, E. (2006). Demonstrating rigor using thematic analysis: A hybrid approach of inductive and deductive coding and theme development. *International Journal of Qualitative Methods*, 5(1), 80–92.
<https://doi.org/10.1177/160940690600500107>

- Finer, S. E. (1997). *The history of government from the earliest times: Ancient monarchies and empires*. Oxford University Press. <https://cir.nii.ac.jp/crid/1360301164101744896>
- Fox, J. (2018). *An introduction to religion and politics: Theory and practice* (2nd ed.). Routledge. <https://doi.org/10.4324/9781315183787>
- Frisch, S. A., & Kelly, S. Q. (2012). Political science and the archives. In S. A. Frisch, D. B. Harris, S. Q. Kelly, & D. C. W. Parker (Eds.), *Doing archival research in political science* (pp. 33–154). Amherst Press.
- Gandhi, M., Tagore, R., & Bhattacharya, S. (1997). *The Mahatma and the poet: Letters and debates between Gandhi and Tagore, 1915-1941*. National Book Trust. <https://cir.nii.ac.jp/crid/1130282271316067584>
- Geertz, C. (1980). *Negara: The theatre state in nineteenth-century Bali*. Princeton University Press. <https://www.fulcrum.org/concern/monographs/rb68xc071.html>
- Gerring, J. (1998). *Party ideologies in America, 1828-1996*. Cambridge University Press. <https://cir.nii.ac.jp/crid/1130282272873332992>
- Govigli, M. V., Efthymiou, A., & Stara, K. (2021). From religion to conservation: Unfolding 300 years of collective action in a Greek sacred forest. *Forest Policy and Economics*, 131, 1–45. <https://doi.org/10.1016/j.forpol.2021.102575>
- Green, A. W. (1993). *Hobbes and human nature*. Transaction Publishers. <https://cir.nii.ac.jp/crid/1130000798127872640>
- Guest, G., MacQueen, K. M., & Namey, E. E. (2012). *Applied thematic analysis*. Sage Publications. <https://cir.nii.ac.jp/crid/1361699993842595072>
- Habermas, J. (2022). Reflections and hypotheses on a further structural transformation of the political public sphere. *Theory, Culture & Society*, 39(4), 145–171. <https://doi.org/10.1177/02632764221112341>
- Haig, R. M. (2020). The concept of income: Economic and legal aspects. In G. W. Dean & M. C. Wells (Eds.), *Forerunners of realizable values accounting in financial reporting* (pp. 140–167). Routledge. <https://doi.org/10.4324/9781003051091>
- Halperin, S., & Heath, O. (2020). *Political research: Methods and practical skills*. Oxford University Press. <https://cir.nii.ac.jp/crid/1131975282641918720>
- Hanson, J. K., & Sigman, R. (2021). Leviathan’s latent dimensions: Measuring state capacity for comparative political research. *The Journal of Politics*, 83(4), 1495–1510. <https://doi.org/10.1086/715066>
- Head, B. W. (2022). *Wicked problems in public policy: Understanding and responding to complex challenges*. Springer Nature. <https://doi.org/10.1007/978-3-030-94580-0>
- Hedges, P. M. (2021). *Understanding religion: Theories and methods for studying religiously diverse societies*. University of California Press. <https://doi.org/10.1525/9780520970861>
- Hershkoff, H., & Loffredo, S. (2022). Standing for democracy: Is democracy a procedural right in Vacuo? A democratic perspective on procedural violations as a basis for Article III standing. *Buffalo Law Review*, 70(2), 523-612. <https://digitalcommons.law.buffalo.edu/buffalolawreview/vol70/iss2/1>
- Hobbes, T. (1999). *The elements of law, natural and politic: Part I, human nature, Part II, de corpore politico; with three lives*. Oxford University Press. <https://philpapers.org/rec/GASTEO-6>
- Holmes, G. (2024). *Augustan England: Professions, state and society, 1680-1730*. Taylor & Francis. <https://cir.nii.ac.jp/crid/1130282272428130944>
- Holsti, K. J. (1996). *The state, war, and the state of war*. Cambridge University Press. <https://cir.nii.ac.jp/crid/1360292620701858176>
- Honig, B. (2023). *Political theory and the displacement of politics*. Cornell University Press. <https://doi.org/10.1515/9781501768453>

- Kitromilides, P. M., & Tsoukalas, C. (2021). *The Greek revolution: A critical dictionary*. Harvard University Press. <https://doi.org/10.4159/9780674259324>
- Knoblauch, H. (2005). Focused ethnography. *Forum qualitative sozialforschung/forum: Qualitative social research*, 6(3), 1–14. <https://doi.org/10.17169/fqs-6.3.20>
- Koukounaras, L. M. (2022). The socio-pedagogical dynamics of religious knowledge in religious education: A participatory action-research in Greek secondary schools on understanding diversity. *Religions*, 13(5), 1–27. <https://doi.org/10.3390/rel13050395>
- Lasswell, H. D. (2013). *The analysis of political behavior*. Routledge. <https://cir.nii.ac.jp/crid/1130282269218882304>
- Linklater, A. (2020). *The idea of civilization and the making of the global order*. Policy Press. <https://doi.org/10.56687/9781529213898>
- Lipset, S. M. (2003). Political man: The social bases of politics. In R. A. Dahl, I. Shapiro, & J. A. Cheibub (Eds.), *The democracy sourcebook* (pp. 56–64). Massachusetts Institute of Technology.
- Matasci, D. (2020). Assessing needs, fostering development: UNESCO, illiteracy and the global politics of education (1945–1960). In E. Unterhalter (Ed.), *Measuring the unmeasurable in education* (pp. 35–53). Routledge. <https://doi.org/10.4324/9780429444494>
- McLeod, J., & Connor, K. O. (2022). Ethics, archives, and data sharing in qualitative research. In M. Tesar, M. A. Peters, & L. Jackson (Eds.), *Is the university an ethical academy?* (pp. 105–117). Routledge. <https://doi.org/10.4324/9781003324881>
- Melko, M. (2008). The origins of civilization: Essay with notes. *Comparative Civilizations Review*, 59(59), 9–28. <https://scholarsarchive.byu.edu/ccr/vol59/iss59/3>
- Mikac, R., & Wahdyudin, A. Y. (2021). The impact of migration on university education. *2nd International Indonesia Conference on Interdisciplinary Studies (IICIS 2021)*, 605, 14–24. <https://www.atlantis-press.com/proceedings/iicis-21/125965490>
- Murphy, J. B., & Garrard, G. (2019). *How to think politically: Sages, scholars, and statesmen whose ideas have shaped the world*. Bloomsbury Publishing. <https://orca.cardiff.ac.uk/id/eprint/132906>
- Nightingale, A. J., Eriksen, S., Taylor, M., Forsyth, T., Pelling, M., Newsham, A., Boyd, E., Brown, K., Harvey, B., Jones, L., Bezner Kerr, R., Mehta, L., Naess, L. O., Ockwell, D., Scoones, I., Tanner, T., & Whitfield, S. (2019). Beyond technical fixes: Climate solutions and the great derangement. *Climate and Development*, 12(4), 343–352. <https://doi.org/10.1080/17565529.2019.1624495>
- O’Sullivan, N. (1976). Implications of the conflicts in Libya and Syria for the responsibility to protect doctrine. In J. Dent & S. P. Perišić (Eds.), *Conservatism*. (pp. 783–814). Zbornik Pravnog Fakulteta u Zagrebu. <https://www.croris.hr/crosbi/publikacija/prilog-casopis/244965>
- Orr, J. A., Vinebrooke, R. D., Jackson, M. C., Kroeker, K. J., Kordas, R. L., Mantyka-Pringle, C., Van den Brink, P. J., De Laender, F., Stoks, R., Holmstrup, M., Matthaei, C. D., Monk, W. A., Penk, M. R., Leuzinger, S., Schafer, R. B., & Piggott, J. J. (2020). Towards a unified study of multiple stressors: Divisions and common goals across research disciplines. *The Royal Society Publishing*, 287, 1–10. <https://doi.org/10.1098/rspb.2020.0421>
- Patton, M. Q. (2014). *Qualitative research & evaluation methods: Integrating theory and practice*. Sage Publications. <https://study.sagepub.com/patton4e/help>
- Paxton, P., Hughes, M. M., & Barnes, T. D. (2020). *Women, politics, and power: A global perspective*. Rowman & Littlefield Publishers. <https://cir.nii.ac.jp/crid/1130000795439524224>

- Pierre, J., & Peters, B. G. (2020). *Governance, politics, and the state*. Bloomsbury Publishing. <https://cir.nii.ac.jp/crid/1131693804099867008>
- Rahe, P. A. (1994). *Republics, ancient and modern*. UNC Press Books. <https://cir.nii.ac.jp/crid/1130000798039043072>
- Rancière, J. (2023). Politics, identification, and subjectivization. In M. J. Léger (Ed.), *Identity Trumps socialism* (pp. 35–40). Routledge. <https://doi.org/10.4324/9781003320890>
- Razavi, S., Jakeman, A., Saltelli, A., Prieur, C., Iooss, B., Borgonovo, E., Plischke, E., Lo Piano, S., Iwanaga, T., Becker, W., Tarantola, S., Guillaume, J. H. A., Jakeman, J., Gupta, H., Melillo, N., Rabitti, G., Chabridon, V., Duan, Q., Sun, X., . . . Maier, H. R. (2021). The future of sensitivity analysis: An essential discipline for systems modeling and policy support. *Environmental Modelling & Software*, 137, 1–22. <https://doi.org/10.1016/j.envsoft.2020.104954>
- Sabine, G. H., & Thorson, T. L. (2018). *A history of political theory*. Oxford and IBH Publishing. <https://cir.nii.ac.jp/crid/1130000795656742016>
- Saldaña, J. (2021). *The coding manual for qualitative researchers*. Sage Publications. <https://www.torrossa.com/en/resources/an/5018667>
- Sandberg, J., & Alvesson, M. (2020). Meanings of theory: Clarifying theory through typification. *Journal of Management Studies*, 58(2), 487–516. <https://doi.org/10.1111/joms.12587>
- Schreier, M. (2012). *Qualitative content analysis in practice*. Jacobs University Bremen.
- Schumpeter, J. A. (1976). *Capitalism, socialism, and democracy*. Routledge. <https://doi.org/10.4324/9780203202050>
- Selznick, P. (2020). *Law, society, and industrial justice*. Quid Pro Books. <https://cir.nii.ac.jp/crid/1130282270450040192>
- Shively, W. P., & Schultz, D. (2022). *Power and choice: An introduction to political science*. Rowman & Littlefield. <https://cir.nii.ac.jp/crid/1130000793874162176>
- Skinner, Q. (1978). *The foundations of modern political thought: Volume 2, the age of reformation*. Cambridge University Press. <https://cir.nii.ac.jp/crid/1130282271165077376>
- Smith, J. A. (2024). *Qualitative psychology: A practical guide to research methods*. Sage Publications. <https://cir.nii.ac.jp/crid/1130021052190479134>
- Sommer, J. M., & Hargrove, A. (2020). Power and politics in the world-system. *Journal of World-Systems Research*, 26(2), 263–287. <https://doi.org/10.5195/jwsr.2020.998>
- Taylor, C. (2021). The politics of recognition. In J. Arthur (Ed.), *Campus wars* (pp. 249–263). Routledge. <https://doi.org/10.4324/9780429038556>
- Terchek, R. J., & Moore, D. K. (2000). Recovering the political Aristotle: A critical response to Smith. *American Political Science Review*, 94(4), 905–911. <https://doi.org/10.2307/2586215>
- Tichenor, M., & Sridhar, D. (2019). Metric partnerships: Global burden of disease estimates within the World Bank, the World Health Organization, and the Institute for Health Metrics and Evaluation. *Wellcome Open Research*, 4, 1–24. <https://doi.org/10.12688/wellcomeopenres.15011.2>
- Toffler, A. (2022). *Powershift: Knowledge, wealth, and power at the edge of the 21st century*. Bantam. <https://cir.nii.ac.jp/crid/1130000798386776576>
- Tridimas, G. (2021). Religion without doctrine or clergy: The case of ancient Greece. *Journal of Institutional Economics*, 18(4), 677–691. <https://doi.org/10.1017/s1744137421000461>
- Wasserman, G., & Fullmer, E. (2023). *The basics of American politics*. Routledge. <https://doi.org/10.4324/9781003329343>

- Weber, M. (2009). *From Max Weber: Essays in sociology*. Routledge.
<https://cir.nii.ac.jp/crid/1130282271506445056>
- Weible, C. M., Nohrstedt, D., Cairney, P., Carter, D. P., Crow, D. A., Durnova, A. P., Heikkila, T., Ingold, K., McConnell, A., & Stone, D. (2020). COVID-19 and the policy sciences: Initial reactions and perspectives. *Policy Science*, 53(2), 225–241.
<https://doi.org/10.1007/s11077-020-09381-4>
- Williams, H. (2021). The meaning of “Phenomenology”: Qualitative and philosophical phenomenological research methods. *The Qualitative Report*, 26(2), 366–385.
<https://doi.org/10.46743/2160-3715/2021.4587>
- Wolff, J. (2023). *An introduction to political philosophy*. Oxford University Press.
<https://cir.nii.ac.jp/crid/1130282272629325568>
- Yack, B. (2023). *The problems of a political animal: Community, justice, and conflict in Aristotelian political thought*. University of California Press.
<https://cir.nii.ac.jp/crid/1130282271124747648>

Book review: The practice of English as a medium of instruction (EMI) around the world

Reviewed by **Pisith Chin¹, Mardy Serey², Ei Thandar Win³, Try Va⁴**

¹ National University of Cheasim Kamchaymear, Kampong Cham, Cambodia

² Svay Rieng University, Svay Rieng, Cambodia

³ Radio International School, Magway, Myanmar

⁴ University of Heng Samrin Thbongkhmum, Thbongkhmum, Cambodia

Article history: Received: **December 21, 2024**; Revised: **March 21, 2025**; Accepted: **May 12, 2025**

Book information

Editor	Carol Griffiths
Genre	Academic/Non-fiction
Edition	1st edition
Copyright	2023
Published	2023
Publication location	Switzerland
Imprint	Springer Nature
Book's DOI	https://doi.org/10.1007/978-3-031-30613-6
Pages	252
ISBN	978-3-031-30612-9
Subjects	EMI educational research

Corresponding author

Pisith Chin

National University of Cheasim Kamchaymear, Kampong Cham, Cambodia

Email: pisithchinnuck.edu@gmail.com

1. Introduction

The Practice of English as a Medium of Instruction (EMI) around the World examines the international application of EMI, emphasizing its adoption in diverse locations such as Europe, Asia, Africa, and Latin America. The book analyzes the motives, advantages, obstacles, and solutions associated with EMI from the viewpoints of both teachers and students. Every chapter offers a summary of regional settings, policies, and practices, highlighting the necessity for efficient planning, teacher training, and student assistance. Regardless of varied cultural and linguistic contexts, shared objectives encompass the enhancement of English proficiency, the improvement of employability, and the augmentation of global competitiveness. The book globally finishes with suggestions for enhancing EMI application internationally.

2. Summary of the book

In the introduction of the book, Griffiths (2023) noted that “The Practice of EMI around the World,” features 11 chapters that discuss the application of EMI in various locations worldwide, such as Europe, Asia, Africa, and Latin America. Specifically, every chapter critically examines previous research and presents new investigations conducted in various

settings. Moreover, the book focuses on the lack of extensive research on the efficacy and difficulties of EMI. Its goal, therefore, is to achieve theoretical rigor and clarity in defining EMI in connection with ideas such as Content-Based Instruction and Content and Language Integrated Learning. In addition, every chapter comprises a comprehensive examination of existing literature, a thorough presentation of the study, the obtained results, a detailed discussion, the potential ramifications, and recommendations for future research. Furthermore, the research employs different methods to investigate the motivations, benefits, challenges, and suggestions associated with EMI from both instructors and students. Notably, the regional studies offer valuable perspectives on the distinct contexts and difficulties related to EMI. In terms of coverage, the book concentrates on various regions, including Sub-Saharan Africa (SSA), the Middle East, North Africa, Western and Southern Europe, Central Asia, Southeast Asia, Latin America, Central and Eastern Europe, East Asia, South Asia, and the Nordic and Baltic States. Finally, the book ends with a comparative meta-analysis of data from different areas. As a result, catering to policymakers, institutional leaders, graduate students, and academics, this collection provides significant insights into the practices of EMI and contributes to the development of educational policy and practice.

In the next chapter, Griffiths (2023) reviewed the practice of EMI around the world. Specifically, the author notes that the chapter explores the utilization of EMI in all the aforementioned domains and analyzes the commonalities and distinctions. This inquiry, therefore, aims to propose a comprehensive definition of EMI that is applicable in many circumstances and to explore the reasons for its adoption. Additionally, it seeks to identify the perceived benefits of EMI, provide advice for its effective implementation, and address the obstacles associated with it.

In line with this, Nel and Ssentanda (2023) authored an EMI chapter in SSA. In particular, this chapter provides a concise definition and a concise history of the evolution of the medium of instruction in SSA, a comprehensive overview of the policies that govern the language of instruction in selected SSA countries, and a detailed explanation of their implementation in teacher preparation. Moreover, the chapter highlights the EMI disputes in higher education and the education sector by drawing on systematic studies and scholarly research conducted within SSA contexts. To deepen the analysis, the authors also conducted a paper on a multi-site case study to further investigate EMI problems in SSA.

Similarly, Kırkgöz et al. (2023) noted that the Middle East has also seen the EMI trend, which is consistent with worldwide trends. Using educators' and students' perspectives on EMI use, this chapter provides a thorough summary of research on Middle Eastern nations' EMI policies. Specifically, in the Turkish settings, research is also carried out in a public institution to verify the results obtained locally and regionally. Furthermore, a discourse on the perspectives of educators and students, the perceived obstacles, and suggested approaches to address those obstacles is showcased.

In a related context, Salama (2023) highlighted that the assumption that English is the international language and that EMI would improve students' English proficiency and give them better opportunities in today's competitive job market has led to rapid changes in EMI implementation in the North African region, which is the subject of this chapter. However, this chapter underscores that there is currently a dearth of empirical research demonstrating the efficacy of EMI in this setting, and this quick acceptance of EMI is frequently unfounded in theory or beneficial pedagogical practice. To address this, the chapter describes research that was carried out at one Egyptian university to investigate instructors' and students' perceptions of its importance and use in the classroom.

Meanwhile, Gavriilidou and Mitits (2023) noted that certain nations in Western and Southern Europe, including Italy, Spain, and France, have a long history of using EMI, while other countries, such as Croatia, Serbia, and North Macedonia, seem to have fewer studies about this topic. Following this, a small-scale qualitative case study of EMI practices in Greek public universities is presented after the chapter's comprehensive review of the relevant literature. As a result, the authors offer recommendations for further field study and some initial conclusions for the area.

According to another perspective, Hajar et al. (2023) noted that despite their parents enrolling them in an EMI school, the students gradually recognized that this experience facilitated their development as English language users and simplified the visualization of their aspirational future selves concerning academic, professional, and intercultural achievements. Simultaneously, the educators derive considerable satisfaction from engaging with clever and self-motivated students in an EMI setting, facilitating their development into the individuals they aim to become.

Correspondingly, Siregar et al. (2023) noted that Southeast Asia has witnessed a surge in the popularity of EMI. In this chapter, the perspectives and behaviors of EMI students and instructors within the context of Indonesian higher education are examined. It is found that both overt and covert rules at their schools addressed the requirement for English usage, the difficulties associated with EMI teaching and learning in both online and in-person settings, and the various, situation-specific solutions to those difficulties. The findings thus indicate that to provide instructors with the tools they need to teach English successfully, there is a need for professional development on EMI.

Similarly, Aliaga-Salas and Pérez-Andrade (2023) examined how EMI is being implemented in Latin America from the viewpoints of educators and learners. Although Latin American EMI is still relatively new and is not widely used, there seems to be an increasing enthusiasm in these nations to apply this strategy. In support of this, participants provide information on their experiences in EMI courses, as well as the possibilities and problems they faced and how they overcame them, using an open-ended questionnaire. Nevertheless, although EMI is seen by both groups as a strategy that increases mobility and cooperation opportunities, students' limited English proficiency may have a detrimental impact on its implementation.

In terms of Central and Eastern Europe, Pawlak and Papaja (2023) identified the following countries as part of the region: Austria, Belarus, Belgium, the Czech Republic, Germany, Hungary, Kosovo, Liechtenstein, Luxembourg, Moldova, the Netherlands, Poland, Romania, Russia, Switzerland, and Ukraine. To elaborate, this chapter provides an overview of key issues related to EMI in the region. The first section, therefore, addresses contextual factors and briefly outlines selected policies and research findings. Subsequently, the second section presents the results of a study exploring the perceptions of Polish university students and instructors regarding EMI.

Turning to East Asia, Sano et al. (2023) revealed that this region is home to a sizable and diversified population as well as a vast geographical area. In this chapter, the EMI situation is reviewed in the context of this larger region, unique research undertaken in Japan is presented, and its implications are addressed. The results suggest that students enroll in EMI courses to enhance their employability and English skills, while instructors' most common response when asked the same question was that they did not "choose" the courses; rather, their institution needed them. Consequently, numerous challenges are identified, and some suggestions are made for resolving those challenges.

Concerning South Asia, Padwad et al. (2023) presented an overview of EMI in several South Asian nations: Afghanistan, Bangladesh, Bhutan, India, Maldives, Nepal, and Sri Lanka. Although these nations have distinct socio-cultural traits, they also share historical, cultural, and social aspects. As a result, the EMI scenario in these nations reflects both shared and distinctive characteristics. The chapter, therefore, begins with a national overview of EMI before discussing the results of two small-scale studies on instructors' and students' opinions regarding EMI conducted in Sri Lanka and India.

In another regional analysis, Dikilitaş and Griffiths (2023) reviewed existing literature on the use of English-Medium Instruction (EMI) in the Nordic countries (e.g., Norway, Sweden, Finland, Denmark, and Iceland) and the Baltic states (e.g., Estonia, Latvia, and Lithuania). In addition, they presented findings from a small-scale study conducted at a Norwegian university involving both instructors and students. Specifically, the study explored motivations for choosing to work or study in an EMI environment, perceived benefits and drawbacks, and strategies for addressing the challenges. The chapter, finally, concludes with a discussion of the implications and offers recommendations for future research.

To synthesize the findings, Kök (2023) aimed to compile the knowledge from other chapters about the condition of EMI in various global areas. Interestingly, findings seem to be very consistent, despite the geographic, cultural, and linguistic differences across these regions. That is, EMI is prized as a way to advance English as the world's language franca, to get worldwide recognition, and to profit from the money it brings in. However, the issues are also acknowledged concerning how they affect regional languages and cultures, as well as the issues brought about by insufficient planning, lack of assistance, and typically poor skill levels on the side of both instructors and students. Accordingly, the chapter ends with recommendations for providing better support to instructors and students.

3. Analysis and evaluation

The book *The Practice of English as a Medium of Instruction (EMI) around the World* offers a comprehensive analysis of EMI across various regions. It highlights common goals like improving English proficiency and global competitiveness while addressing challenges such as inadequate planning, limited research, and cultural impacts. Each chapter presents regional perspectives, emphasizing teacher training, student support, and policy development. Despite diverse contexts, consistent themes include the need for stronger institutional support and more research on EMI's effectiveness.

3.1. Themes and style

The book explores themes of global competitiveness, English proficiency, cultural impacts, teacher training, and policy development. Its style is analytical and comparative, combining regional case studies with critical insights to highlight both common challenges and diverse approaches to EMI implementation worldwide.

3.2. Contributions

The book contributes to understanding global EMI practices by offering regional insights, highlighting shared challenges and benefits, and providing practical recommendations for policymakers, educators, and researchers to enhance EMI implementation and effectiveness.

3.3. Cohesion and structure

The book is well-structured, with cohesive chapters that follow a consistent format, literature review, research findings, and recommendations, allowing for easy comparison of EMI practices across regions while maintaining a clear, logical flow throughout.

4. Personal reflection

Reading the book has broadened our understanding of the complexities and multifaceted nature of EMI implementation across diverse contexts. The book highlights the importance of considering institutional policies, teacher preparedness, student needs, and cultural factors when implementing EMI. It has deepened our appreciation for the necessity of adequate planning, ongoing support for educators, and the balance between promoting English proficiency and preserving local languages and identities. This reflection encourages us to critically examine EMI practices in Cambodia's higher education system and explore how best to address context-specific challenges.

5. Conclusion

In conclusion, the book provides a comprehensive and insightful exploration of EMI practices across various global contexts. It emphasizes the need for effective policies, teacher training, and contextual adaptation to ensure successful implementation. The book highlights both the benefits and challenges of EMI, urging a balanced approach that respects local languages and cultures while enhancing global competitiveness. This collection serves as a valuable resource for educators, policymakers, and researchers looking to deepen their understanding of EMI and contribute to its improvement in diverse educational settings.

Acknowledgments

This article was reviewed and provided feedback by two anonymous reviewers. After revision and acceptance, the article was then edited by CJESS's editors. Thus, the authors would like to express their deepest recognition to these individuals, as well as CJESS, for making this article appear in the intellectual world.

Conflict of interest

No potential conflict of interest was reported by the authors.

Funding

The authors received no financial support for the study, authorship, and/or publication of this article.

Declaration of AI usage

The authors did not use any AI generative tools to generate any part of this article.

References

Aliaga-Salas, L., & Pérez-Andrade, G. (2023). EMI in Latin America. In C. Griffiths (Ed.), *The practice of English as a medium of instruction (EMI) around the world* (pp. 133–152). Springer. https://doi.org/10.1007/978-3-031-30613-6_9

- Dikilitaş, K., & Griffiths, C. (2023). EMI in the Nordic and Baltic countries. In C. Griffiths (Ed.), *The practice of English as a medium of instruction (EMI) around the world* (pp. 211–226). Springer. https://doi.org/10.1007/978-3-031-30613-6_13
- Gavriilidou, Z., & Mitits, L. (2023). EMI in Western and Southern Europe. In C. Griffiths (Ed.), *The practice of English as a medium of instruction (EMI) around the world* (pp. 73–92). Springer. https://doi.org/10.1007/978-3-031-30613-6_6
- Griffiths, C. (2023). The practice of EMI around the world: An overview. In C. Griffiths (Ed.), *The practice of English as a medium of instruction (EMI) around the world* (pp. 7–12). Springer. https://doi.org/10.1007/978-3-031-30613-6_2
- Griffiths, C. (Ed.). (2023). *The practice of English as a medium of instruction (EMI) around the world*. Springer. <https://link.springer.com/book/10.1007/978-3-031-30613-6>
- Hajar, A., Babeshko, Y., & Smagulova, J. (2023). EMI in Central Asia. In C. Griffiths (Ed.), *The practice of English as a medium of instruction (EMI) around the world* (pp. 93–111). Springer. https://doi.org/10.1007/978-3-031-30613-6_7
- Kırkgöz, Y., Yüksel, M. E., & Aslantürk, H. (2023). EMI in the Middle East. In C. Griffiths (Ed.), *The practice of English as a medium of instruction (EMI) around the world* (pp. 33–51). Springer. https://doi.org/10.1007/978-3-031-30613-6_4
- Kök, I. (2023). The practice of EMI around the world: A metaview. In C. Griffiths (Ed.), *The practice of English as a medium of instruction (EMI) around the world* (pp. 227–244). Springer. https://doi.org/10.1007/978-3-031-30613-6_14
- Nel, C., & Ssentanda, M. E. (2023). EMI in Sub-Saharan Africa. In C. Griffiths (Ed.), *The practice of English as a medium of instruction (EMI) around the world* (pp. 13–31). Springer. https://doi.org/10.1007/978-3-031-30613-6_3
- Padwad, A., Wijeskera, H., Phyak, P., Manan, S., & Mohamed, N. (2023). EMI in South Asia. In C. Griffiths (Ed.), *The practice of English as a medium of instruction (EMI) around the world* (pp. 191–210). Springer. https://doi.org/10.1007/978-3-031-30613-6_12
- Pawlak, M., & Papaja, K. (2023). EMI in Central and Eastern Europe. In C. Griffiths (Ed.), *The practice of English as a medium of instruction (EMI) around the world* (pp. 153–170). Springer. https://doi.org/10.1007/978-3-031-30613-6_10
- Salama, A. (2023). EMI in North Africa. In C. Griffiths (Ed.), *The practice of English as a medium of instruction (EMI) around the world* (pp. 53–71). Springer. https://doi.org/10.1007/978-3-031-30613-6_5
- Sano, A., Zheng, Y., & Griffiths, C. (2023). EMI in East Asia. In C. Griffiths (Ed.), *The practice of English as a medium of instruction (EMI) around the world* (pp. 171–189). Springer. https://doi.org/10.1007/978-3-031-30613-6_11
- Siregar, F., Sabnani, R., & Dinh, T. (2023). EMI in South-East Asia. In C. Griffiths (Ed.), *The practice of English as a medium of instruction (EMI) around the world* (pp. 113–131). Springer. https://doi.org/10.1007/978-3-031-30613-6_8

Keywords and definitions

English medium instruction (EMI) refers to the practice of using the English language to teach academic subjects in countries or regions where the majority language is not English.

Higher education is third-level education after you leave school. It takes place at universities and Further Education colleges and normally includes undergraduate and postgraduate study. Higher education gives you the chance to study a subject you are interested in and can boost your career prospects and earning potential.

Global competitiveness refers to a nation's or a company's ability to successfully compete in the international marketplace, characterized by producing high-quality goods and services at reasonable costs and achieving satisfactory returns.

Teacher training encompasses the structured programs and processes designed to equip individuals with the necessary knowledge, skills, and attitudes to become effective educators. It involves both pre-service (before entering the profession) and in-service (ongoing professional development) training.

Educational policies are the rules, guidelines, and strategies governments and educational organizations implement to manage and improve education systems, encompassing everything from curriculum to funding and teacher training.

Appendices

Appendix 1. Foreign Experts of CJESS

No.	Full Name	Degree	Country
1.	Buratin Khampirat	PhD	Thailand
2.	Robby Yuli Endra	PhD	Indonesia
3.	Aung Myo Hein	MA	Myanmar
4.	Ganda Febri Kurniawan	MA	Indonesia
5.	Tharatep Sanlee	MA	Thailand
6.	Ei Thandar Win	MA	Myanmar

Appendix 2. Core Editorial Members of CJESS

No.	Full Name	Role	Degree	Country
1.	Sereyrath Em	Chief Editor	PhD	Cambodia
2.	Dina Pen	Manager	PhD	Cambodia
3.	Buratin Khampirat	Editor	PhD	Thailand
4.	Saban Bon	Editor	PhD	Cambodia
5.	Mardy Serey	Editor	PhD	Cambodia
6.	Ganda Febri Kurniawan	Editor	MA	Indonesia
7.	Tharatep Sanlee	Associate Editor	MA	Thailand
8.	Ei Thandar Win	Associate Editor	MA	Myanmar
9.	Robby Yuli Endra	Technical Support	MA	Indonesia

Appendix 3. Current Guidelines for Authors and Reviewers

1. For authors

You must read and acknowledge that you've completed the requirements below before proceeding.

- The submission has not been previously published, nor is it before another journal for consideration (or an explanation has been provided in Comments to the Editor).
- The submission file is in OpenOffice, Microsoft Word, or RTF document file format.
- Where available, URLs for the references have been provided.
- The text is single-spaced; uses a 12-point font; employs italics, rather than underlining (except with URL addresses); and all illustrations, figures, and tables are placed within the text at the appropriate points, rather than at the end.
- The text adheres to the stylistic and bibliographic requirements outlined in the Author's Guidelines.
- The manuscript must be written in English with no plagiarism and has never been published before, or is currently being submitted for publication elsewhere.
- The manuscripts require a minimum of at least 1500 words for book reviews, 3000–4000 words for short articles, and 6000–8000 words for full-length articles, including everything.
- Manuscripts, except for book reviews, must include an English abstract of no more than 250 words, followed by five keywords.

- Use a reference management and formatting program like [Mendeley](#), [EndNote](#), or [Zotero](#). The authors can also do citations and references manually, but they must ensure the consistency between citations and references. The reference list needs to follow APA 7th style, and the citation needs to be in-text.
- Make sure to prepare your manuscript using the paper template and format provided by CJESS.

2. For reviewers

- **Contribution to editorial decisions**

Peer review assists editors in making editorial decisions and, through editorial communications with authors, may assist authors in improving their manuscripts. Peer review is an essential component of formal scholarly communication and lies at the heart of scientific endeavor. CJESS shares many views that all scholars who wish to contribute to the scientific process must do their fair share of reviewing.

- **Promptness**

Invited reviewers who feel unqualified to review the research reported in a manuscript or know that its prompt review will be impossible should immediately notify the editors and decline the invitation to review so that alternative reviewers can be contacted.

- **Confidentiality**

The Editor-in-Chief (who would only do so under exceptional and specific circumstances) must authorize the display or discussion of any manuscripts received for review as confidential documents. This is also true for invited reviewers who decline the review invitation.

- **Standards of objectivity**

To improve the manuscript, authors should conduct objective reviews and formulate observations clearly with supporting arguments. Personal criticism of the authors is inappropriate, and the reviewers may reject this.

- **Acknowledgment of sources**

Reviewers should locate pertinent published work that the authors have not yet cited. The relevant citation should accompany any statement, observation, derivation, or argument reported in previous publications. Reviewers should also notify the editors of any substantial similarity or overlap between the manuscript under consideration and any other manuscript (published or unpublished) of which they have personal knowledge.

- **Disclosure and conflicts of interest**

To contact alternative reviewers, any invited reviewers who have conflicts of interest due to competitive, collaborative, or other relationships or connections with any of the authors, companies, or institutions connected to the manuscript and the work described therein should immediately notify the editors, declare their conflicts of interest, and decline the invitation to review.

Reviewers cannot use unpublished material from a submitted manuscript in their research without the authors' express written consent. The reviewers must maintain the

confidentiality of privileged information or ideas acquired through peer review and refrain from using them for personal gain. This is also true for invited reviewers who decline the review invitation.

Appendix 4. Peer Review Process



Figure 4.1 Peer Review Process

1. Submitting a manuscript

The corresponding or submitting author submits the manuscript to the journal through the Open Journal System (OJS). Occasionally, our journal may accept submissions by email.

2. Editorial office assessment

The journal checks the manuscript's composition and arrangement against the journal's author guidelines to make sure it includes the required sections and stylizations. The journal does not assess the manuscript's quality at this point.

3. The Editor-in-Chief's evaluation

The editor-in-chief ensures that the paper is appropriate for the journal, sufficiently original, and interesting. If not, the editor-in-chief may reject the paper without further review.

4. The Editor-in-Chief assigns an editor

Some journals have associate editors who handle peer review. At this stage, if they undergo peer review, they will receive an assignment.

5. Invitation to reviewers

The handling editor sends invitations to individuals he or she believes would be appropriate reviewers. After receiving responses, the handling editor issues additional invitations as needed, aiming to secure the required number of acceptances, typically two, although journal-specific variations may exist.

6. Respond to invitations

Potential reviewers consider the invitation against their expertise, conflicts of interest, and availability. They then accept or decline. If possible, they might also suggest alternative reviewers when declining.

7. A review-initiative process

The reviewer sets aside time to read the paper several times. The reviewer uses the first read to form an initial impression of the work. If the reviewer finds major problems at this stage, they may feel comfortable rejecting the manuscript without further work. Otherwise, they will read the paper several more times, taking notes to build a detailed point-by-point review. The journal then receives the review, either with a recommendation to accept or reject it or else with a revision request (usually flagged as either major or minor) before reconsideration.

8. The journal's review assessment

Before making an overall decision, the handling editor considers all of the returned reviews. If the reviews differ widely, the editor may invite another reviewer to get an additional opinion before making a decision.

9. The decision's communication

The editor sends a decision email to the author, including any relevant reviewer comments. Whether the comments are anonymous or not will depend on the type of peer review that the journal operates.

10. Next steps

After acceptance, the paper goes into production. If the handling editor rejects the article or sends it back for a major or minor revision, they should incorporate constructive comments from the reviewers to assist the author in improving the article. From here, the handling editor should email or write to the reviewers to inform them of their results. If the handling editor sends the paper back for revision, the reviewers should expect to receive a revised version, unless they have chosen not to participate further. However, if only minor changes were required, the handling editor could complete this follow-up review.

Appendix 5. All Editorial Team Members as of December 2024

Editorial	Total Count	Cambodian	Foreigner	Master	Doctoral
Advisory Board	06	04	02	03	03
Editor-in-Chief	01	01	n/a	n/a	01
Editors	09	07	02	06	03
Associate Editors	03	01	02	03	n/a
Technical Support	01	n/a	01	n/a	01
Reviewers	27	27	n/a	24	03

Advisory Board

Asst. Prof. Dina Pen, PhD (Scopus ID: 59316667400)

- Lecturer, Svay Rieng University (SRU), Svay Rieng, Cambodia
- PhD in Political Science, Khemarak University, Phnom Penh, Cambodia

- PhD Candidate in Educational Science, The University of Cambodia, Phnom Penh, Cambodia

Than Chhorn, PhD

- Researcher and Teacher Educator, National Institute of Education (NIE), Phnom Penh, Cambodia
- PhD in Foreign Linguistics and Applied Linguistics, Shandong University (SDU), China

Pisith Chin, PhD Candidate (Scopus ID: 59316333200)

- Executive Director, the National University of Cheasim Kamchaymear (NUCK), Kampong Cham Campus, Cambodia
- PhD Candidate in Educational Science, the National University of Cheasim Kamchaymear (NUCK), Cambodia

Thach Ban, PhD Candidate

- Academic Office, the National University of Cheasim Kamchaymear, Kampong Cham, Cambodia
- PhD Candidate in Educational Science, the National University of Cheasim Kamchaymear (NUCK), Cambodia

Robby Yuli Endra, PhD (Scopus ID: 57212685168)

- Full-Time Lecturer at Universitas Bandar Lampung, Indonesia
- Head of Laboratory Computer (2012-2018), Universitas Bandar Lampung, Indonesia

Aung Myo Hein, PhD Candidate

- Former Lecturer, Department of English, Yangon University of Foreign Languages, Ministry of Education, Myanmar
- PhD Candidate, the Graduate School of Global Studies, Tokyo University of Foreign Studies, Japan

Founder and Editor-in-Chief

Sereyrath Em, PhD (Scopus ID: 58000264900)

- Lecturer, National University of Cheasim Kamchaymear (NUCK), Cambodia
- PhD in Educational Science, Khemarak University, Phnom Penh, Cambodia
- PhD in Educational Administration, The University of Cambodia (UC), Phnom Penh, Cambodia
- PhD Candidate in Cooperative Education, Suranaree University of Technology (SUT), Nakhon Ratchasima, Thailand

Editors

Assoc. Prof. Buratin Khampirat, PhD (Scopus ID: 56741201100)

- PhD Supervisor and Lecturer, Suranaree University of Technology, Nakhon Ratchasima, Thailand
- PhD in Educational Research Methodology, Chulalongkorn University, Bangkok, Thailand

Assoc. Prof. Mardy Serey, PhD (Scopus ID: 59261029900)

- Head of the International Relations Office, Svay Rieng University, Cambodia
- PhD in Agricultural Economics, the Vietnam National University of Agriculture, Hanoi, Vietnam

Asst. Prof. Ganda Febri Kurniawan, MA (Scopus ID: 57217100253)

- Full-time Lecturer at Universitas Negeri Semarang, Indonesia
- Editor-in-Chief of the Indonesian Journal of History Education, Indonesia
- Managing Editor of Paramita: Historical Studies Journal, Indonesia

Saban Bon, PhD (Scopus ID: 57911617100)

- Officer, Human Resource Development Department, the Ministry of Education, Youth and Sport (MoEYS), Phnom Penh, Cambodia
- PhD in English for Professional Development, Mae Fah Luang University, Thailand

Somphors Khan, PhD Candidate

- Education inspector, the Ministry of Education, Youth and Sport (MoEYS), Phnom Penh, Cambodia
- PhD candidate in Educational Science, the University of Cambodia (UC), Phnom Penh, Cambodia

Sopheha Phann, PhD Candidate

- Head of ASEAN Office, Ministry of Education, Youth and Sport, Phnom Penh, Cambodia
- PhD Candidate in Cooperative Education, Institute of Social Technology, Suranaree University, Thailand

Nel Nun, MA

- Director, N.E.L. International School, Takeo, Cambodia
- MA in Curriculum Design and Instruction, the Royal University of Phnom Penh (RUPP), Phnom Penh, Cambodia

Sina Pang, MA

- Independent Researcher, Phnom Penh, Cambodia
- MA in TESOL Graduate, the University of Cambodia, Phnom Penh, Cambodia

Sarin Sok, MA

- MA in Education, the University of Huddersfield, United Kingdom
- Education Quality Manager, University of Puthisastra, Phnom Penh, Cambodia

Associate Editors

Koem Hong Chat, MA

- Part-time English lecturer, Royal University of Law and Economics (RULE), Phnom Penh, Cambodia
- MA in TESOL, Royal University of Phnom Penh (RUPP), Institute of Foreign Languages (IFL), Phnom Penh, Cambodia

Tharatep Sanlee, MA

- Dipangkornwittayapat (Taweewattana) Under Royal Patronage School, Thailand
- MA in TESOL, Victoria University of Wellington, Victoria, New Zealand

Ei Thandar Win, MA

- Former Lecturer, Department of English, University of Magway, Myanmar
- Head of the English Department, Radio International School, Myanmar

Technical Support

Robby Yuli Endra, PhD (Scopus ID: 57212685168)

- Full-Time Lecturer at Nandar University Lampung, Indonesia
- Head of Laboratory Computer (2012-2018), Nandar University Lampung, Indonesia

Reviewers

By Loeung, PhD

- Vice Dean, BELTEI International University (BIU), Phnom Penh, Cambodia
- PhD in Business Administration, BELTEI International University (BIU), Phnom Penh, Cambodia

Daro Ruos, MA (Scopus ID: 59904332700)

- Teacher of Research Methodology, Kandal Regional Teacher Training Center, Kandal Province, Cambodia
- Master of Education in Curriculum and Instruction, RUPP, Phnom Penh, Cambodia

Sopheha Yin, PhD Candidate

- English Teacher with a Higher Education Degree, Takeo, Cambodia

- PhD candidate, Second Language Acquisition and Technology in Education, Silla University, South Korea

Sarin Chin, MA

- Head of Policy, Diplomatic Economics, and Strategic Planning Department, the Ministry of Foreign Affairs, Phnom Penh, Cambodia
- Master of Arts in International Relations, Ritsumeikan University, Japan
- Master of Laws (LL.M) in International Human Rights Law, Pannasastra University of Cambodia, Cambodia

Kroeun Kruy, PhD Candidate

- Distinguished English instructor at the Primary Teacher Training School in Kandal province
- PhD Candidate in Educational Science, the University of Cambodia, Phnom Penh, Cambodia

Chandara Lim, MA

- Program Coordinator, KHANA Center for Population Health Research, Phnom Penh, Cambodia
- Master of Health and Community Development, the National Institute of Public Health, Phnom Penh, Cambodia

Thon Houn, PhD Candidate

- Lecturer, the University of Cambodia, Phnom Penh, Cambodia
- PhD candidate in Educational Science, the University of Cambodia, Phnom Penh, Cambodia

Sovanna Huot, PhD Candidate

- Vice School Director of a Cambodian Government High School, Cambodia
- PhD Candidate in Political Science, the University of Delhi, New Delhi, India

Ravy Nhor, MA

- Lecturer, Paññāsāstra University of Cambodia, Cambodia
- MA in TESOL, the University of Cambodia, Phnom Penh, Cambodia

Kassy Sey, PhD Candidate

- Deputy Head of Intellectual Academy, Kandal, Cambodia
- PhD candidate in Educational Science, the University of Cambodia, Phnom Penh, Cambodia

Savin Kin, PhD Candidate

- Biology Teacher with a Higher Education Degree, Takeo, Cambodia

- PhD candidate in Biology at Prince of Songkla University (PSU), Thailand

Pich Chueng, PhD Candidate

- English Teacher with a Higher Education Degree, Prey Veng, Cambodia
- PhD Candidate, National Institute of Education (NIE), Phnom Penh, Cambodia

Hoeun Uong, MA

- Lecturer, Regional Polytechnic Techo Sen Takeo, Cambodia
- MA in Educational Leadership, Thames International University, Paris, France

Mab Mon, MA

- Lecturer, Angkor Khemara University, Kampong Speu, Cambodia
- MA in Education, Mekong University of Cambodia, Phnom Penh, Cambodia

Vannak Sao, PhD Candidate

- Head of English teachers, Prek Leap New Generation School, Phnom Penh, Cambodia
- PhD Candidate, the National Institute of Education (NIE), Phnom Penh, Cambodia

Sok Kuon, PhD Candidate

- Lecturer, Vanda Institute of Accounting, Phnom Penh, Cambodia
- PhD Candidate, National University of Kamchaymear, Kampong Cham, Cambodia

Chanthy Mab, MA

- Lecturer, the National University of Cheasim Kamchaymear (NUCK), Cambodia
- MA in Education, the National Institute of Education (NIE), Phnom Penh, Cambodia

Chanthoeun Yung, MA

- Tactic International School's principal, Cambodia
- MA in Educational Science and MA in TESOL, the National University of Cheasim Kamchaymear (NUCK), Cambodia

Dr. Ponlork Kean, PhD (Honorary)

- History Teacher with a Higher Education Degree, Takeo, Cambodia
- PhD (Honorary) in Political Science and Law, Thames International University, Paris, France

Dr. Chan Raksmeay Dom, PhD (Honorary)

- English Teacher with a Higher Education Degree, Takeo, Cambodia
- PhD (Honorary) in Law, Thames International University, Paris, France

Sovann Ly, PhD Candidate

- Vice-Director of the Institute of Foreign Languages, National University of Battambang, Battambang, Cambodia
- PhD Candidate, National University of Kamchaymear, Kampong Cham, Cambodia

Kosal Mao, MA

- Teacher Trainer, Kampong Cham Regional Teacher Training Center (RTTC), Kampong Cham, Cambodia
- Master of English and Education, Norton University, Phnom Penh, Cambodia
- Master of Education majoring in Curriculum and Instruction, Royal University of Phnom Penh (RUPP), Phnom Penh, Cambodia

Rithy Phat, MA

- Visiting Lecturer, The University of Heng Samrin Tbong Khmum, Tbong Khmum, Cambodia
- Master of English and Education, Norton University (NU), Phnom Penh, Cambodia

Sopha Khann, MA

- Lecturer, Dewey International University, Battambang, Cambodia
- Master of Finance and Banking, Dewey International University, Battambang, Cambodia

Pheara Khy, MA

- Deputy Campus Director, BELTEI International School, Phnom Penh, Cambodia
- ESL Teacher, BELTEI International School, Phnom Penh, Cambodia
- MA in TESOL, BELTEI International University, Phnom Penh, Cambodia

Sinorn Veth, PhD Candidate

- Lecturer of English and Education, Cambodian University for Specialties (CUS), Kampot, Cambodia
- PhD Candidate, National University of Kamchaymear, Kampong Cham, Cambodia

Sokhoeurn Mour, MA

- Deputy Director of Policy Division, Secretariat General of the National Committee for Lifelong Learning, Ministry of Education, Youth and Sport, Phnom Penh, Cambodia
- MA in Education, Royal University of Phnom Penh, Phnom Penh, Cambodia

Our editorial board also reaches out to external reviewers when we do not have experts specialized in any manuscripts submitted.

Appendix 6. Call for papers

The Cambodian Journal of Educational and Social Sciences (CJESS) welcomes original research articles, review articles, and book reviews. CJESS publishes two issues a year in June and December, and the authors are welcome to submit their articles year-round. However, they

must notice that each article needs at least three months from submission to publication. Authors need to [register](#) and follow the instructions to submit articles to CJESS, or if they are not familiar with the open journal system (OJS), they may submit their papers directly to **cjessjournal555@gmail.com** along with the full name(s), affiliation(s), short bio(s), and email address(es).

However, as the world grows and everything changes rapidly, technology is one of the things that people need to learn, develop, and adjust to. Therefore, individuals should learn to utilize technology according to their specific needs, and authors should become proficient in OJS, given its widespread use by numerous journals and publishers worldwide.

For the article format, authors can go to our [journal website](#) and download the template. The original research articles should conform to the template, while review articles and book reviews should align with the template's title page and begin the subsequent sections accordingly.

Thanks,

CJESS Editorial Team



E-ISSN: 3007-2328

P-ISSN: 3007-4649

DOI: 10.69496/cjess

**Cambodian Journal of Educational and Social Sciences
(CJESS)**

Phone: +855 92571902/+855 69444678

**Editorial Office of the Cambodian Journal of
Educational and Social Sciences (CJESS) | Takeo Province
Cambodia, Post Code: 210803**

Email: cjess.journal@educationalfields.com

**This work is licensed under a Creative Commons Attribution-ShareA-
like 4.0 International License**

Published by English Academic Essay (EAE)