

FUTUREd: Future Trends in University Research and Education



<https://futures-j.org>

FUTUREd: Future Trends in University Research and Education

Volume 1, Issue 2 (2026)

Published by Lakeland University Japan

1-10-5 Yokoami, Sumida-ku

Tokyo, 130-0015 Japan

Publication date: September 30, 2026

<https://futures-j.org>

editor@futures-j.org

ISSN: 2760-8263 (print)

ISSN: 2760-8271 (online)

© 2026 by the Authors

Cover artwork by Samantha Angela Salvador

Licensed under CC BY 4.0



Editorial Board

Editor-in-Chief:

Anderson Passos – Lakeland University Japan, Japan

Associate Editors (in alphabetical order):

Anne McLellan Howard – Miyazaki International University, Japan

Kaori Fairbanks – Bunkyo Gakuin University, Japan

Mori Yasuaki – Waseda University, Japan (former)

Omid Taddjedini – Temple University Japan, Japan

All members of the FUTURED Editorial Board serve in a voluntary capacity. They contribute their expertise and time in support of scholarly communication and the advancement of education. Their participation does not imply employment or any contractual relationship with Lakeland University Japan or the FUTURED journal.

Table of Contents

Editorial Board	xiii
Foreword	xvii
About FUTURED	xix

RESEARCH ARTICLES

Final-Year Sri Lankan IT Undergraduates' Perspectives on the Use of AI Tools in Academic Work: A Qualitative Study.....	116
Social Catalysts and Autonomous Motivation: Peer-Driven Exercise Adherence in a Year-Long University Resistance Training Program.....	124

CONCEPTUAL AND THEORETICAL PAPERS

Polymaking in the era of internationalizing universities	140
--	-----

CASE STUDIES AND PRACTICE REPORTS

“English Is Just Like an Outer Shell”: A Case Study of a Multilingual Indian Family in Tokyo.....	152
A Pilot Case Study of Task Design and Speaking-Related Tension in Early English Education: Child Speech in the Context of Promotional Framing	164

CRITICAL REFLECTIONS

Rethinking Dictogloss: A Practitioner's Reflection on Students' Perceptions of Cognitive Engagement	174
What Textbooks Tell Us about Language Learning: A Comparative Reflection on Japanese and English Teaching Materials	182

POSITION PAPERS

Integrating Graphic Organizers and Cooperative Learning in EFL Reading: A Synergistic Framework for SLA, CLIL, and Social-Emotional Learning	188
--	-----

Acknowledgements	200
------------------------	-----

Foreword

When I sat down to write the foreword for our first issue, I honestly did not know what to expect. A new journal is a bit like a new school year - you prepare as much as you can, and then you wait to see who shows up. For that first issue, ten papers made it through review and into print, which already felt like more than we had any right to expect from a journal with no track record. For this second issue, eight more made it through, and I am just as happy about these eight as I was about those first ten.

One thing that struck me while preparing Issue 2 was how quickly things moved. Authors responded to reviewer feedback promptly, often faster than I expected. Reviewers, in turn, returned thoughtful, detailed comments well within our timelines. In my experience, this kind of smooth back-and-forth is not something you can take for granted, especially for a journal still finding its footing. So, before anything else, I want to thank everyone involved (authors and reviewers alike), for treating this process with the same seriousness we hoped it would deserve.

If Issue 1 was about announcing that FUTURED existed, I think Issue 2 is about proving that it works. A journal is not really validated by its first issue; almost anyone can produce one good issue with enough encouragement and goodwill. It is validated by the second, and the third, and so on — by whether people keep submitting, keep reviewing, and keep trusting the process. What I find most encouraging is not just that eight papers made it into this issue, but that we received far more submissions than that number alone shows. A healthy review process means not everything that arrives is ready for publication, and I take real reassurance in the fact that authors keep sending us their work anyway.

The articles in this issue cover just as many topics as we hoped for from the beginning - classroom reflections on teaching practice, studies of learner motivation, a look at multilingual family life, and broader work on how universities handle internationalization. Once again, I am reminded that "the future of education" is not one conversation but many happening at once, in different rooms, in different countries, among people who may never otherwise meet. That is exactly the kind of space we hoped FUTURED could become.

There is a Japanese expression, GANBARU (頑張る), that is hard to translate exactly. It means something like to keep trying, to do your best, to push forward even when it is not easy. I think it describes this issue well. Producing an academic journal is not glamorous work. It is mostly quiet persistence: emails, deadlines, formatting checks, more emails. But that quiet persistence is exactly what turns a first issue into a second, and eventually into a journal people can rely on.

So thank you, again, to everyone who made this issue possible. And yes, before anyone asks - I did use AI to help tidy up this foreword too. It still has not learned to fix my commas as reliably as I would like, but I am told that, too, is a work in progress.

Anderson Passos

Editor-in-Chief

FUTURED: Future Trends in University Research and Education

Lakeland University Japan

Tokyo, Japan

About FUTUREd

FUTUREd (Future Trends in University Research and Education) is a peer-reviewed academic journal dedicated to exploring emerging developments in higher education, with a particular focus on the evolving relationship between education, technology, and society. The journal provides a platform for scholars, educators, and practitioners to examine how innovations, especially in artificial intelligence and digital technologies, are reshaping teaching, learning, research, and institutional practices in universities around the world.

FUTUREd welcomes interdisciplinary contributions that address both theoretical and practical dimensions of educational change. The journal publishes a range of article types, including empirical research studies, conceptual and theoretical papers, policy analyses, case studies of institutional or classroom innovation, and reflective perspectives on the challenges and opportunities facing higher education.

By bringing together diverse perspectives from different academic fields and institutional contexts, FUTUREd aims to foster thoughtful dialogue on the future of university education and to support evidence-based approaches to innovation in teaching and learning.

FUTUREd is published with the support of Lakeland University Japan.



Final-Year Sri Lankan IT Undergraduates' Perspectives on the Use of AI Tools in Academic Work: A Qualitative Study

A M C SENEVIRATHNA, PhD.	Visiting Lecturer, School of Arts and Humanities, ECU Sri Lanka Campus
P H A B SHANTHA	Senior Lecturer, Faculty of Management Studies & Commerce, University of Sri Jayewardenepura

FUTUREd, Volume 1, Issue 2 (2026)

Pages: 116 - 123

ISSN: 2760-8263 (print)

ISSN: 2760-8271 (online)

Keywords:

AI tools, perspectives, Sri Lankan universities, final year IT undergraduates, qualitative study

Corresponding authors:

A M C Senevirathna

Chathurika.Senevirathna@ecu.edu.lk

P H A B Shantha

shantha@sjp.ac.lk



Abstract: This focused qualitative study investigates how final year IT undergraduates in Sri Lankan universities perceive the use of artificial intelligence (AI) tools in their academic work. A sample of 14 was selected employing a mix of purposive and convenient sampling, ensuring the inclusion of different districts, genders, and diverse areas in Information and Technology. Their perspectives, captured through semi-structured, in-depth interviews were analyzed manually using thematic analysis to identify common codes and themes. The analysis revealed five key themes representing the participants' awareness of AI as an integral part in academic work. Main findings largely mirrored their positive attitude towards the use of AI as a reality in their academic practice. However, their vagueness in equating AI to plagiarism offered insights for reassessing the concept of academic integrity in the university system. Moreover, the participants' divided ideas about AI as a dependable tool, and about replacing lecturers with AI, signaled emerging views on the dynamic status of using AI in the Sri Lankan university system through the lens of final-year IT undergraduates. The study thus fills the gap in qualitative research concerning the use of AI, purely from the Sri Lankan undergraduates' perspectives against the rapidly changing global educational practices.

1. INTRODUCTION

AI plays an essential role in shaping the global educational atmosphere (Verboom et al., 2025). As 'a branch of computer science related to making computers behave like humans' (Bahadur, 2025, p.50), AI has influenced the educational sector significantly (Bahadur, 2025). Several authors have identified AI as a significant research area in education (Berens et al., 2023; Thomas et al., 2023).

Openness to AI is considered welcoming in the tertiary educational sector worldwide (Folk, D. P., Wu, C., & Heine, S. J., 2025). For instance, both in the West and in the East, academia is interested in incorporating AI practices into productive pedagogical practices (Qian, 2025; Schmidt et al., 2025). In the same vein, the Sri Lankan research community has also been interested in the combination of AI and university education (Perera et al., 2025; Aflal et al., 2024). However, in this

context, the undergraduates' perspectives on using AI in their academic tasks are not adequately examined. Students' perspectives offer valuable information for educators to understand the context and make informed decisions (Cook-Sather, 2006; Rogers, 1983). Capturing the views of specific groups of undergraduates focusing on their field of study would provide insights into how Sri Lankan undergraduates would position the role of AI in practice. Therefore, contextual analyses through in-depth interviews of such demographics are a necessity. This study, thus, aims to explore the final year IT undergraduates' perspectives through a qualitative approach.

2. AI AND TERTIARY EDUCATION

Academics have researched how AI contributes to both undergraduate and postgraduate academic tasks (Bahadur, 2025; Lin et al., 2023). For instance, Arifani et al., (2026) revealed that mainly ChatGPT and other AI tools help postgraduate students to improve their research themes and their overall proposal quality. Similarly, at the undergraduate level, Lin et al., (2023) note that AI tools as essential instruments for learners' academic performance. Fitria (2021) argues that AI applications and academic writing efficiency have been strongly linked to achieving improvement in academic writing. Furthermore, considering the students' opinion on AI, Lin et al., (2023) note that students interact with AI tools with the belief that it enhances their academic performance. However, some studies highlight the negative impact of using AI on students in their academic tasks (Selwyn, 2024; Weeks et al., 2024). Overdependence on AI tools would result in superficial learning, thereby degrading students' cognitive engagement and critical thinking skills (Selwyn & Aagaard, 2022, as cited in Bahadur, 2025). It is in this research backdrop that our study on Sri Lankan undergraduates' use of AI is situated.

Use of AI in the Sri Lankan university system has been investigated. Perera et al. (2025), for instance, examined the impact of artificial intelligence in higher education within a Sri Lankan public university. Using a mixed method as their methodological approach, their study explored the

impact of AI tools on Sri Lankan undergraduates and lecturers. However, their attention is limited to the fourth-year students enrolled in the Accountancy and Finance programs. Moreover, using a quantitative methodological approach, Nawarathne et al. (2023) have also measured Sri Lankan undergraduates' use of AI tools. They have particularly assessed the students' perceived usefulness for academic tasks and analyzed how these perceptions correlate with students' self-reported academic performance. Despite several studies relating to AI, which broadly focus on several aspects of education, such as research and academic writing, not adequate qualitative research has been conducted specifically focusing on the undergraduates in Sri Lankan state universities. Particularly, the use of AI by final-year undergraduates following the IT stream remains little explored. Thus, this study focuses mainly on this demographic through their own perspectives.

3. METHODOLOGY

A qualitative research design was used to explore the perspectives of individuals (Creswell & Poth, 2018) regarding their interaction with AI in academic tasks, and how their experiences have impacted their academic activity.

The sample consists of fourteen final year undergraduates from five Sri Lankan state universities in the field of information technology. A mix of purposive and convenience sampling was employed (Creswell & Creswell, 2018; Palinkas et al., 2015) to ensure the inclusion of different districts, genders, and diverse areas in the stream of Information Technology. Participants were approached through academic staff members and through available undergraduates' networks. We attempted to reach more participants from the Colombo district, which carries a greater concentration of universities that offer IT related degree programs.

Data were collected through semi-structured interviews, which are often conducted with one respondent at a time using mix closed- and open-ended questions, along with follow-up why or how questions (Adams, 2015). Interviews were

conducted face-to-face and online (WhatsApp and Zoom) in the medium of English. Each participant was interviewed for approximately 30 – 50 minutes. The audio-recorded interviews were transcribed using the Microsoft Word Transcribe tool.

Table 1: Demographic Distribution of Interviewees

Participant	Degree	Specialization	Gender	University Location
P1	BIT	Game and Animation	Male	Gampaha
P2	BIT	Game and Animation	Male	Gampaha
P3	BSc	Business Information Systems	Female	Colombo
P4	BSc	Business Information Systems	Male	Colombo
P5	BSc	Applied Mathematics & Computing	Female	Vavuniya
P6	BSc	Information Technology	Female	Colombo
P7	BA	Information Technology	Male	Colombo
P8	BSc	Applied Mathematics & Computing	Male	Vavuniya
P9	BSc	Management & IT	Female	Gampaha
P10	BIC T	Information & Communication Technology	Male	Matara
P11	BSc	Information Technology	Female	Anuradhapura
P12	BSc	Information Technology	Male	Colombo
P13	BSc	Information Technology	Male	Colombo
P14	BSc	Business Information Systems	Female	Colombo

The interview data were analyzed using thematic coding following the six-phase framework outlined by Clarke and Braun (2013). The transcripts were reviewed multiple times to ensure familiarity with the data. Meaningful statements related to participants' perceptions towards the use of AI in academic work were highlighted and assigned initial open codes. These codes were subsequently examined to identify recurring patterns and to develop broader themes representing participants' perspectives.

4. ETHICS STATEMENT

Participants' informed consent was gained prior to interviews. Participants were also informed that their participation during the interview was voluntary, and they could withdraw from the process at any time without any consequences. Participants' anonymity was maintained throughout the study, and no personally identifying information was disclosed in the reporting of the findings.

5. RESULTS

Following the initial coding stage, related codes were grouped into broader themes based on similarities in meaning and relevance to the research objectives. When reviewing the data collected from the fourteen interviews, five themes emerged: (1) AI as an integral part in academic work (2) AI needs verification (3) AI may replace lecturers (4) disadvantages of using AI, and (5) AI and plagiarism. Patterns were identified through comparison of coded segments across the data, allowing the researchers to interpret recurring perceptions of participants toward the use of AI in academic work.

Table 1: Emergent Themes and Relevant Codes

Theme	Relevant Codes
AI as an integral part in academic work Subthemes: • Advantages • Institutional Facilitation of AI tools • Student contributions	AI as a learning tool, concept explanation, summarizing content, academic support, lecturers' recommendation of AI
AI needs verification	Cross-checking information, erroneous information, reliability concerns
AI may replace lecturers	Technology replacing teaching roles, but need for human interaction
Disadvantages of using AI	Over-dependence, reduced problem-solving skills, reduced creativity
AI and plagiarism	AI-generated content as plagiarism, issues with directly copying, perceiving AI-generated content as non-plagiaristic

6. DISCUSSION

While the findings largely complement some common existing research (Lohitha & Sumathi, 2024), there are some aspects, such as AI replacing lecturers and AI and plagiarism, which raise awareness in academia regarding transitional views of final year IT undergraduates in terms of AI use in their academic work. While ChatGPT was the mostly used AI tool of the sample, Gemini AI was revealed as the second AI tool in common. This finding of final year Sri Lankan undergraduates' dependence on AI reflects some recent studies that record ChatGPT as a highly utilized AI tool by students (Stojanov et al., 2024).

Table 2: AI Tools Used by Participants

Participant	Frequently used AI Tools
P1	Gemini Pro, ChatGPT
P2	Gemini Pro, ChatGPT
P3	ChatGPT, DeepSeek
P4	ChatGPT, Gemini, Claude AI
P5	ChatGPT, Gemini
P6	ChatGPT, Gemini
P7	ChatGPT, Gemini Pro
P8	ChatGPT, Gemini
P9	Gemini Pro, ChatGPT
P10	ChatGPT, Gemini
P11	ChatGPT, Gemini Pro
P12	ChatGPT, DeepSeek
P13	ChatGPT, Gemini
P14	ChatGPT, Gemini Pro, DeepSeek

6.1. AI as an Integral Part in Academic Work

The theme, 'AI as an integral part in academic work', captures the participants' common belief in the use of AI as a grounded reality in their academic work. They acknowledged a lot of advantages of AI, such as summarizing content, explaining concepts, problem-solving, generating program code, supporting research, and searching academic information. Certain Observations run parallel with the findings of researchers such as Weeks et al. (2024), who argue that 'educators

must embrace these technological developments' (as cited in Bahadur, 2025, p. 51). Participants' positive attitude towards AI as an essential component in academic work was mainly supported by two aspects, institutional facilitation of using AI tools and the advantages of AI. Many participants mentioned that their lecturers recommend different AI tools and campuses provide them with free access to them. P3, a Business Information Systems major, explained: 'Some lecturers also allow us to use AI... they told like we are moving with it, so use AI, and they are also introducing some AI tools'. Similarly, P4, an Information Systems major, said: 'The teachers... they do recommend for studying purposes, for learning purposes, using AI tools'. The same was elaborated by P14, a Business Information Systems major as well. For her, 'lecturers expect us to use them [AI tools] in some activities'. These perspectives regarding lecturers' recommendations reflect the use of AI in academic work positively.

The subtheme, student contributions, emerged reflecting the perceptions of their active involvement in monitoring, verifying, and manipulating the AI tools to achieve their academic tasks effectively. P1, a Game and Animation major, for example, explained his strong belief in using AI within his control: 'If we are not fully dependent on the AI, like we [stress 'we'] continue our work, that's fine. We can't be fully dependent on the AI. Mm-hmm, imagine like a doctor, doctors need to do the prescription. So, OpenAI company production is like a prescription. Mm-hmm. We need to use our mind also when we use it.' The participant stressed the importance of having their active involvement in the process of using AI tools in the academic system. In fact, all the participants perceived their conscious interference with AI as an important factor in completing academic activities.

6.2. AI Needs Verification

'AI needs verification' emerged as an interrelated theme with the 3rd subtheme of the previously discussed 1st theme. While many students consider that AI information needs to be cross-checked for accuracy, there was one participant (P8, Applied Mathematics & Computing) who was relatively

more confident of its validity. In answering the researchers' question, 'Do you think you can rely on the information provided by AI?', the participant replied, 'Yeah, I think so'.

However, answering the cross-question, 'then, do you think that the information provided by AI, let's say, for example, ChatGPT, is 100% okay, is it trustworthy?', the participant further says, 'I can't tell 100% okay, madam, because I found for some parts, they're not giving proper answers, I mean, ChatGPT. So, I can... I can tell 97% (P8).

Erroneous references were another aspect that was mentioned by several participants. Thus, to them, AI-generated information was not reliable to use for academic tasks without cross-checking. 'Imagine we asked ChatGPT to give some references, it gives lists and lists at times they're wrong. There are many lists coming in with wrong dates and so' (P11, Information Technology major).

6.3. AI may Replace Lecturers

'AI may replace lecturers' was a controversial theme that emerged in revealing two contrasting opinions regarding AI playing the role of a human lecturer in the university context. Several participants' responses manifested openness to replacing human lecturers with AI. This was contradictory to findings of some existing studies (Chan & Tsi, 2024) which reported hesitation among students to accept AI as a replacement for human lecturers. In fact, three participants (P1, P2, P4) perceived AI as a total replacement of lecturers, especially in terms of direct lecture delivery. One participant (P1), in the context of Gaming and Animation, was very positive that AI could instruct them in their academic work. Similarly, P4 in the field of Business Information Systems reflected: 'AI can replace teachers, uh yeah lecturers uh actually uh I think AI can, yeah I think AI can replace lecturers'. These findings raise concerns about an emerging perception among undergraduates that potentially reflects an underestimation of traditional interpersonal teaching that extends beyond rapid information delivery. However, many participants stressed the importance of human teacher involvement in their learning process, which can never be compared to

AI alone. They mentioned personalized feedback sessions, mentoring, and personalized human approach as unique to human lecturers. To quote P10, an ICT Major, 'We can meet lecturers personally and discuss our problems'. Thus, despite the overwhelming influence of AI in final year IT undergraduates' academic experiences and some of their recognition of its capacity to replace human lecturers, certain findings still support interpersonal, ethical, mentoring, and context-sensitive dimensions of traditional human lecturing.

6.4. Disadvantages of Using AI

'Disadvantages of using AI' was another key theme that emerged in the analysis, providing insights into divided students' views. For example, in contrast with some findings of similar studies (Davis-Bibb, 2025) which presented time saving as an advantage of using AI, many participants in our study perceived the use of AI as a waste of time in certain scenarios. For instance, two participants attributed this to the failure of AI in providing precise answers in response to queries. Despite AI being helpful in searching for information, the participants explained how time gets wasted in reading unnecessarily lengthy details that AI tools provide. P3 reflected:

'Think we ask Chat to define a concept, it gives us so many details. So, we need to go through them all and find the answers'.

Moreover, reducing one's problem-solving skills and creativity were also considered as disadvantages of using AI. To one participant, 'all people now go for templates, right, more than thinking newly, it's the way' [P4].

While admitting the fact that use of AI is indeed a reality in the prevailing Sri Lankan university context, the findings represent participants' awareness regarding the possible disadvantages it brings in their academic engagement as well.

6.5. AI as Plagiarism

In line with some previous studies (Davis-Bibb, 2025), some participants in the sample also considered inappropriate use of AI as plagiarism, while some participants held totally contrasting and controversial views, such as use of AI cannot

be claimed as plagiarism. One participant reflected: ‘They [AI tools] have access to many articles and sometimes when we also write things, sometimes we never have plagiarism. But the tools can save our writing. So, yeah, actually, I sometimes I don't care about that [plagiarism] because it is anyway there. So, when we use AI, we can't take it as plagiarism because it is anyway everywhere’ (P1). To this participant, demarcating what is and what is not plagiarism is not practical as AI has invaded all spheres of academic work.

Similarly, we encountered some vagueness in a few students’ perspectives regarding drawing the line between AI and plagiarism. For instance, P4, a Business Information Systems major, admits that there is some ethical conflict of ownership of information: ‘actually the entire credit does not go to us’. However, in terms of plagiarism, her vagueness is still clear: ‘it's really sort of plagiarism’.

Thus, the data demonstrate some conceptual ambiguity among students regarding the boundary between AI-accessible academic work and plagiarism, illustrating the emerging perceptions of negotiating ethical standards in AI-assisted academic contexts. Overall, student perceptions of AI and plagiarism are divided. While some strictly equate AI use with plagiarism, others demonstrate a greater acceptance of AI for academic support, accepting its use at different levels within academic work. This suggests an evolving understanding of AI's ethical role in academic work.

7. CONCLUSIONS

This focused qualitative study identified some final year IT undergraduates’ perspectives regarding the use of AI tools in their academic work. The themes that emerged represented participants’ diverse perspectives, mainly reflecting their positive attitude towards the use of AI. The findings further revealed a blurred boundary between plagiarism and academic tasks assisted by AI tools, surfacing participants’ difficulty in defining plagiarism in their AI-accessible academic context. It was one prominent aspect that provided insights into reconsidering academic integrity in the university system. The other themes reflected participants’

controversial ideas about accepting AI as human lecturer replacement, perceiving AI as a tool that requires verification, and the disadvantages of using AI in academic work. Moreover, divided perceptions of replacing lecturers with AI signaled some emerging views regarding the status of AI in the Sri Lankan university system through the final year IT undergraduates’ lens. These findings contribute to the body of scholarship on AI and university education, offering the undergraduate voice regarding the use of AI in the Sri Lankan state university system. Our study brings implications for lecturers, policymakers, and researchers interested in today’s AI-accessible university context.

ACKNOWLEDGEMENTS

The authors wish to thank all the interviewees for their participation.

REFERENCES

- Adams, W. C. (2015). Conducting semi-structured interviews. In J. S. Wholey, H. P. Hatry, & K. E. Newcomer (Eds.), *Handbook of practical program evaluation* (4th ed., pp. 492–505). Jossey-Bass.
<https://doi.org/10.1002/9781119171386.ch19>
- Aflal, S. M., Shamugarajah, S., Thiruthanigesan, K., Balasubramaniam, B., Samarakoon, U., & Ragel, R. G. (2024). The impact of AI-driven educational transformation in Sri Lanka's higher education. In *2024 6th International Conference on Advancements in Computing (ICAC)* (pp. 223–228). IEEE.
<https://doi.org/10.1109/ICAC64487.2024.10851080>
- Arifani, Y., Anwar, K., Maruf, N., Stryaningrum, R. W., Masduki, & Sahiruddin. (2026). Can ChatGPT scaffold postgraduate students' thesis proposals? Voices of EFL teachers and students. *International Journal of Learning, Teaching and Educational Research*, 25(2), 899–920.
<https://doi.org/10.26803/ijlter.25.2.40>
- Bahadur, G. C. (2025). The use of artificial intelligence among university students: A narrative inquiry. *Academia Journal of Humanities & Social Sciences*, 2, 49–61.
<https://doi.org/10.3126/ajhss.v2i1.77160>

- Berens, P., Cranmer, K., Lawrence, N. D., von Luxburg, U., & Montgomery, J. (2023). AI for science: An emerging agenda. *arXiv*. <https://doi.org/10.48550/arXiv.2303.04217>
- Braun, V., & Clarke, V. (2006). Using thematic analysis in psychology. *Qualitative Research in Psychology*, 3(2), 77–101. <https://doi.org/10.1191/1478088706qp063oa>
- Chan, C. K. Y., & Tsi, L. H. Y. (2024). Will generative AI replace teachers in higher education? A study of teacher and student perceptions. *Studies in Educational Evaluation*, 83, 101395. <https://doi.org/10.1016/j.stueduc.2024.101395>
- Clarke, V., & Braun, V. (2013). Teaching thematic analysis: Overcoming challenges and developing strategies for effective learning. *The Psychologist*, 26(2), 120–123.
- Cook-Sather, A. (2006). Sound, presence, and power: “Student voice” in educational research and reform. *Curriculum Inquiry*, 36(4), 359–390. <https://doi.org/10.1111/j.1467-873X.2006.00363.x>
- Creswell, J. W., & Creswell, J. D. (2018). *Research design: Qualitative, quantitative, and mixed methods approaches* (5th ed.). Sage Publications.
- Creswell, J. W., & Poth, C. N. (2018). *Qualitative inquiry and research design: Choosing among five approaches* (4th ed.). Sage Publications.
- Davis-Bibb, C. (2025). *The impact of AI on learning: A qualitative study of student perceptions at the community college level. Practitioner to Practitioner*, 14(2), 17–32.
- Dwivedi, Y. K., Hughes, L., Ismagilova, E., Aarts, G., & Rana, N. P. (2023). So what if ChatGPT wrote it? Multidisciplinary perspectives on opportunities, challenges, and implications of generative conversational AI for research, practice and policy. *International Journal of Information Management*, 71, 102642. <https://doi.org/10.1016/j.ijinfomgt.2023.102642>
- Fitria, T. N. (2021). Artificial intelligence (AI) in education: Using AI tools for academic writing. *Journal of English Language Teaching and Applied Linguistics*, 3(2), 1–8.
- Folk, D. P., Wu, C., & Heine, S. J. (2025). Cultural variation in attitudes toward social chatbots. *Journal of Cross-Cultural Psychology*, 56(3), 219–239. <https://doi.org/10.1177/00220221251317950>
- Lin, M. P., Yin, H. T., Lee, M. H., Hung, C. Y., Chang, Y. S., & Tsai, C. C. (2023). Students' interaction with generative AI and perceived impact on academic performance. *Computers and Education: Artificial Intelligence*, 4, 100132. <https://doi.org/10.1016/j.caeai.2023.100132>
- Lohitha, R., & Sumathi, S. (2026). An analysis on impact and utilisation of ChatGPT among college students. *Journal of Emerging Technologies and Innovative Research*, 13(7).
- Nawarathne, U. M. L. A., Thayasivam, U., & Dayarathne, K. P. N. S. (2025). Usability and academic impact of AI tools on higher education in Sri Lanka. *KDU Journal of Multidisciplinary Studies*, 7(2), 149–161. <https://doi.org/10.4038/kjms.v7i2.213>
- Palinkas, L. A., Horwitz, S. M., Green, C. A., Wisdom, J. P., Duan, N., & Hoagwood, K. (2015). Purposeful sampling for qualitative data collection and analysis in mixed method implementation research. *Administration and Policy in Mental Health and Mental Health Services Research*, 42(5), 533–544. <https://doi.org/10.1007/s10488-013-0528-y>
- Perera, G., Perera, A., & Dissanayake, H. (2025). Impact of artificial intelligence (AI) tools in Sri Lankan higher education. In T. Murugan, K. P., & A. M. Abirami (Eds.), *Driving quality education through AI and data science* (pp. 481–502). IGI Global Scientific Publishing. <https://doi.org/10.4018/979-8-3693-8292-9.ch021>
- Qian, Y. (2025). Pedagogical applications of generative AI in higher education: A systematic review of the field. *TechTrends*, 69, 1105–1120. <https://doi.org/10.1007/s11528-025-01100-1>
- Rogers, C. R. (1983). *Freedom to learn for the 80s*. Charles Merrill Publishing.
- Selwyn, N., & Aagaard, J. (2022). Banning ChatGPT? Rethinking the regulation of artificial intelligence in higher education. *Learning, Media and Technology*, 47(1), 1–4.
- Selwyn, N. (2024). On the limits of artificial intelligence (AI) in education. *Nordisk tidsskrift for pedagogikk og kritikk*, 10(1), 3–14. <https://doi.org/10.23865/ntpk.v10.6062>

- Schmidt, D. A., Alboloushi, B., Thomas, A., & Magalhaes, R. (2025). Integrating artificial intelligence in higher education: Perceptions, challenges, and strategies for academic innovation. *Computers and Education Open*, 9, 100274.
<https://doi.org/10.1016/j.caeo.2025.100274>
- Stojanov, A., Liu, Q., & Koh, J. H. L. (2024). University students' self-reported reliance on ChatGPT for learning: A latent profile analysis. *Computers and Education: Artificial Intelligence*, 6, 100243.
<https://doi.org/10.1016/j.caeai.2024.100243>
- Thomas, R., Bhosale, U., Shukla, K., & Kapadia, A. (2023). Impact and perceived value of the revolutionary advent of artificial intelligence in research and publishing among researchers: A survey-based descriptive study. *Science Editing*, 10(1), 27–34.
<https://doi.org/10.6087/kcse.294>
- Verboom, A. D. P. R., Pais, L., Zijlstra, F. R. H., Oswald, F. L., & Santos, N. R. dos. (2025). Perceptions of artificial intelligence in academic teaching and research: A qualitative study from AI experts and professors' perspectives. *International Journal of Educational Technology in Higher Education*, 22, 46. <https://doi.org/10.1186/s41239-025-00546-w>
- Weeks, J. O., Voshaar, J., Plate, B. J., & Zimmermann, J. (2024). Generative AI usage and exam performance. *arXiv*.
<https://doi.org/10.48550/arXiv.2404.19699>



Social Catalysts and Autonomous Motivation: Peer-Driven Exercise Adherence in a Year-Long University Resistance Training Program

Max PRAVER	Faculty of Foreign Studies, Meijo University
Ian ROTH	Faculty of Foreign Studies, Meijo University
Robert CVITKOVIC	Faculty of Foreign Languages, Teikyo University

FUTUREd, Volume 1, Issue 2 (2026)

Pages: 124 - 138

ISSN: 2760-8263 (print)

ISSN: 2760-8271 (online)

Keywords:

physical activity, resistance training, peer influence, self-regulated learning, motivation

Corresponding author:

Max Praver

praver@meijo-u.ac.jp



Abstract: Physical fitness among Japanese university students has declined over recent decades, and rates of sustained physical activity in this population remain low. This qualitative case study examines the experiences of 10 first-year students who took part in a year-long resistance training intervention at a Japanese university. Drawing exclusively on semi-structured exit interviews, we investigated the motivational beliefs, behavioral strategies, and social dynamics shaping sustained exercise engagement. Peer influence was the most prominent driver of adherence in participants’ accounts: six of the ten identified a specific “social catalyst,” a knowledgeable and committed peer whose presence, encouragement, and practical guidance they described as decisive in overcoming the friction of initiation. Several participants also described, retrospectively, a perceived shift from external regulation toward more autonomous motivation, together with self-reported improvements in nutrition, sleep, mood, and concentration. These shifts were uneven: one participant described a continuing reliance on external structure. The findings extend self-regulated learning theory into physical activity contexts and inform the design of student-centered program frameworks, with particular relevance for Japanese higher education, where campus wellness infrastructure is minimal and informal peer networks carry a substantial motivational burden.

1. INTRODUCTION

University is a liminal period during which many students establish physical activity patterns that persist into adulthood (Kwan et al., 2012; Wei et al., 2011). Yet university students demonstrate low

rates of adherence, with only 40-50% meeting exercise guidelines (Keating et al., 2005), and longitudinal studies confirm a significant decline in moderate-to-vigorous physical activity during this period (Aira et al., 2021; Vanhelst et al., 2023).

This decline has been linked to increased academic demands, reduced structured physical education, and competing priorities associated with emerging adulthood (Deliens et al., 2015).

The physical fitness of Japanese university students has declined over recent decades. Shimokado et al. (2013) documented a 26-year decline in physical fitness among Japanese university students alongside changes in body composition, and Japan's Ministry of Education, Culture, Sports, Science, and Technology (MEXT) data show young adults have lost substantial physical strength over the past six decades (Mainichi Japan, 2020). Compared with international peers, Japanese students lack strength and are more likely to be underweight, a trend that appears to have been exacerbated during the COVID-19 period (Okazaki et al., 2023).

Cultural and institutional factors compound this decline. Academic pressures, part-time employment, and sedentary entertainment options contribute to inactive lifestyles (Tamura et al., 2021). Resistance training remains on the fringe of health-promoting practices, especially among women, where concern about a 'bulky' appearance contributes to avoidance (Roth & Praver, 2025). In Japan, the required first-year Physical Education course tends to function as the *tatemaie* (public facade) of physical education, satisfying Ministry requirements rather than providing meaningful instruction (Praver & Roth, 2024). Activity levels among Japanese students have also been reported to decline after the first two years of university, a pattern commonly attributed to the cessation of *bukatsudo* (club activities; Wei et al., 2011). With Japan's aging population driving healthcare costs (Ikegami & Rice, 2023), establishing healthy habits early carries significance beyond individual fitness (Roth & Praver, 2021).

Resistance training offers substantial benefits for university-aged populations: improved physical health, mental well-being, self-efficacy, and academic performance (O'Connor et al., 2010; Radel et al., 2017), reduced depressive symptoms (Gordon et al., 2018), and improved cognitive function (Hillman et al., 2008; Hötting & Röder, 2013). Despite these benefits, participation

remains low and dropout rates are high (Sperandei et al., 2016). Prior research has been largely quantitative, with limited qualitative exploration of the motivational and social dynamics shaping sustained engagement, particularly in Japan, where collectivist values, sedentary lifestyles, and socially constructed images of health create a distinct socio-cultural context.

This study addresses this gap by examining the year-long experiences of 10 Japanese university students who participated in a resistance training intervention. Through qualitative interviews, we investigate: (1) the self-regulated learning approaches that influence students' motivation for resistance training, and (2) the strategies students employ to sustain their motivation over time. By situating our analysis within self-regulated learning (SRL) theory, we aim to understand how students navigate the forethought, performance, and self-reflection phases of learning as they develop and maintain exercise habits within the Japanese university context.

2. LITERATURE REVIEW

2.1. Self-Regulated Learning and Motivation in Physical Activity

Self-regulated learning occurs when individuals are 'metacognitively, motivationally, and behaviorally active participants in their own learning and development processes' (Zimmerman, 1989, p. 329). In physical activity, SRL theory frames how individuals set goals, monitor progress, and maintain motivation across the cyclical phases of forethought (task analysis and motivational beliefs), performance (volitional control and self-monitoring), and self-reflection (self-evaluation and affective response) (Panadero, 2017; Zimmerman & Kitsantas, 1997).

Motivation, a central SRL component, exists on a continuum from external regulation to intrinsic motivation (Deci & Ryan, 2000), with autonomous forms linked to greater exercise adherence and well-being (Greene, 2017; Teixeira et al., 2012). Self-Determination Theory posits that satisfying three basic needs (competence, autonomy, and relatedness) facilitates internalization of extrinsic

behaviors into more autonomous regulation (Ryan & Deci, 2017), a lens particularly relevant for understanding how structured exercise interventions foster lasting change.

2.2. Peer Influence and Social Support in Exercise Behavior

Social factors play a crucial role in adopting and maintaining physical activity. Social Cognitive Theory posits that behavior is shaped through mastery experiences, observational learning, social persuasion, and supportive environments (Bandura, 1986). Peer relationships are a salient influence on physical activity from adolescence onward (Fitzgerald et al., 2012), and in university settings students who exercise with friends report greater enjoyment, accountability, and sustained participation (Stevens et al., 2017). Di Bartolomeo and Papa (2019) further found that physically active students exhibited persistent gains in trust and pro-social behavior.

The concept of ‘exercise companions’ highlights how specific individuals can catalyze physical activity behaviors in others (Rackow et al., 2015), providing both practical support (transportation, workout guidance) and motivational support through encouragement and accountability. Dependence on specific companions may also create vulnerability, however, as their absence can lead to decreased motivation and dropout (Carron et al., 1996).

2.3. The Japanese University Context

Japanese society is generally characterized as collectivist, emphasizing *wa* (group harmony) and interdependent self-construal (Markus & Kitayama, 1991). Such values may amplify peer influence on exercise behavior, since collectivist cultures place greater weight on social expectations (Triandis, 1995). At the same time, cultural norms around appearance for women (Roth & Praver, 2025) and the marginality of gym culture create additional barriers to exercise adoption.

Japanese universities typically lack the campus recreation infrastructure common at Western institutions, and the physical education courses that exist tend to be perfunctory (Praver & Roth, 2024).

This gap means students must rely on their own resources to exercise regularly.

2.4. Research Questions

Building on SRL theory and the importance of social influences in exercise behavior, this study addresses two research questions:

RQ1: What self-regulated learning processes shape Japanese university students’ motivation to engage in resistance training?

RQ2: What social and behavioral strategies do Japanese university students employ to sustain participation in resistance training over an extended period?

3. METHODS

3.1. Research Design

This qualitative case study employed an interpretivist paradigm (Creswell & Creswell, 2018) to examine students’ lived experiences across a year-long resistance training intervention; case study methodology is appropriate for investigating contemporary phenomena where boundaries between phenomenon and context are not clearly evident (Yin, 2003). Two points of clarification are warranted. First, the study reported here is qualitative and draws exclusively on the semi-structured exit interviews described below; no quantitative data were analyzed for this paper. Second, the intervention within which participants were studied was structured as a within-subjects crossover, with participants counterbalanced across required and optional attendance phases (see Table 2). The broader project also collected continuous activity data (Apple Watch), monthly body composition and grip strength, a pre-post well-being inventory, TOEIC scores, and English course grades. Those measures are summarized in Table 2 solely to describe the conditions under which participants’ experiences occurred, and they will be reported separately. All findings below therefore rest on participants’ interview accounts.

3.2. Context and Setting

The study was conducted at a private Japanese university during the 2025-2026 academic year.

Participants were enrolled in the Faculty of Foreign Studies. The institution provides limited PE programming and lacks a comprehensive campus recreation center.

Student health at this institution mirrors national trends (Praver & Roth, 2022): incoming first-year surveys revealed inconsistent health knowledge, with most students exercising less than they knew advisable, underestimating sleep requirements, and showing uneven nutritional awareness. A subsequent 28-day health awareness challenge confirmed low adherence to physical activity and nutrition guidelines (Roth & Praver, 2023).

3.3. Participants

Ten first-year university students (6 men, 4 women) were recruited through purposive sampling to participate in the year-long resistance training program. All participants were enrolled in the Faculty of Foreign Studies and were studying English as their primary area of concentration. Participants ranged in age from 19 to 20 years and had varying levels of prior exercise experience, from no previous structured training to approximately one year of self-directed gym attendance. Table 1 provides participant demographics. All names are pseudonyms to protect participant confidentiality, and all participants provided written informed consent prior to participation. Ethical approval was obtained from the Research Ethics Committee of Meijo University, Nagoya, Japan (Approval No. 2024-41).

A sample of ten participants was chosen to prioritize longitudinal depth over statistical generalizability (Yin, 2003). Tracking participants across a full academic year produced rich, contextually situated accounts. We do not claim data saturation in the sense used in larger interview studies; with ten participants drawn from a single cohort, saturation in that sense cannot be demonstrated and we make no such claim. The warrant for the sample is instead the depth and duration of engagement within a bounded case (Yin, 2003), and the findings are offered as transferable insights rather than as a saturated account of the phenomenon.

Table 1. Participant Demographics

Alias	Gender	Prior Gym Experience	Relevant Experience
Y.M.	M	~1 year (self-directed)	None
S.A.	M	Some	High school baseball club
F.S.	M	None	High school basketball club
Y.O.	M	None	None
K.I.	M	None	High school baseball club
M.M.	M	Some	High school soccer club
Y.U.	F	None	None
H.S.	F	None	Dance club
Y.H.	F	None	None
N.N.	F	None	None

3.4. Intervention Design

The intervention employed a within-subjects crossover design spanning one full academic year (April 2025 to February 2026; see Table 2 for an overview). Participants were assigned in equal numbers to two counterbalanced sequences. Group A was required to attend a local commercial gym at least twice weekly and to complete a prescribed minimalist resistance training routine during Phase 1 (Semester 1), and then attended at their own discretion during Phase 2 (Semester 2). Group B completed the inverse sequence: optional attendance in Phase 1 and required attendance in Phase 2. Because of this counterbalancing, references below to a participant's "required" or "optional" phase denote that individual's own sequence position rather than a fixed semester.

The resistance training routine reflected evidence-based principles appropriate for novice trainees (Carpinelli & Otto, 1998; Westcott et al., 2001). At the start of their required attendance phase, all subjects participated in an orientation session covering proper exercise form, equipment use, and safety guidelines. The exercise program and data collection methods are detailed in Table 2.

Table 2. *Intervention Design Overview*

	Phase 1 (Semester 1)	Phase 2 (Semester 2)
Period	Apr – Aug 2025	Sep 2025 – Feb 2026
Gym attendance	Group A: Required; Group B: Optional	Group A: Optional; Group B: Required
Resistance Training Protocol		
Exercises	Five compound exercises: chest press, row, shoulder press, lat pulldown, leg press	
Sets & repetitions	Two sets per exercise, 8-12 repetitions per set	
Repetition cadence	Controlled tempo (approximately 10 secs per complete repetition) emphasizing proper form and near full range of motion throughout each repetition	
Rest between sets	Approximately 1 minute	
Effort level	Each set taken to momentary muscular failure	
Progressive overload	Weight increased by smallest available increment once participants were able to perform the current load for more than two sets of 12 repetitions with the prescribed cadence and range of motion	
Core work	Swiss ball crunch or back extension (supplementary)	
Step target	8,000 steps/day, continuously tracked via Apple Watch (target informed by Saint-Maurice et al., 2020)	
Data Collection		
Continuous	Apple Watch: daily steps, active energy, exercise minutes	
Monthly	Body composition measurements; grip dynamometry	
Pre & post	Well-being inventory	
Academic	TOEIC scores (June & December 2025); English course grades (4× per semester plus midterm and final)	
Exit Interview	45-minute one-on-one exit interviews (February 2026)	

Note. Training protocol adapted from Roth & Praver (2025). Participants were counterbalanced across the two attendance sequences (Group A, Required → Optional; Group B, Optional → Required). The measures listed under Data Collection were gathered as part of the broader intervention project; the present paper analyzes only the exit interview data.

3.5. Qualitative Data Collection

Data were collected through semi-structured exit interviews conducted at the conclusion of the year-long intervention. The interview protocol was informed by the Self-Regulated Learning Interview Schedule (SRLIS), developed by Zimmerman and Pons (1986), which has been validated across multiple educational domains (Cleary & Russo, 2024). The interview guide was adapted to address exercise-specific contexts and comprised 16 questions organized into six sections: 1) Overall Reflection, 2) Structured Gym Period, 3) Free Gym Period, 4) Barriers and Supports, 5) Perceived Effects, 6) Reflection and Future.

All interview questions were provided in both English and Japanese, with participants responding in whichever language they preferred. Interviews

were conducted face-to-face, lasted approximately 45 minutes, and were audio-recorded with participant permission. Japanese responses were translated into English and reviewed by the research team.

3.6. Data Analysis

Interview data were analyzed using Layder's (1998) adaptive theory, which integrates deductive and inductive approaches. This methodological framework allowed us to employ SRL theory as an organizing structure while remaining open to emergent themes not anticipated by this orienting theory. Analysis proceeded through coding using NVivo software, and initial codes were derived deductively from SRL theory. Inductive codes emerged through line-by-line analysis of transcripts, identifying concepts and patterns not

captured by the theoretical framework (e.g., managing structural and logistical barriers to exercise adherence, peer dependence, structured-to-free transition experiences).

The researchers independently reviewed coded transcripts, resolving disagreements through discussion. Final themes were organized according to the three SRL phases. Trustworthiness was supported through member checking, prolonged engagement over the full academic year, and thick description of the research context. No quantitative data were coded, tested, or otherwise analyzed for this paper. Where the Results below refer to what a participant did during a given phase, the source is that participant's own interview account rather than an attendance log or device record.

Researcher positionality is acknowledged as a factor shaping data collection and interpretation. The lead author served as both the researcher and one of the instructors involved in the intervention, creating a dual role that may have influenced participants' willingness to share candid reflections. This limitation was mitigated using pseudonyms, assurances of confidentiality, the interview structure of the SRLIS, and the involvement of co-researchers in independent coding and theme validation. The authors' professional backgrounds in EFL instruction and personal training informed their interpretive sensitivities to the academic and exercise-related dimensions of participants' experiences. Several additional safeguards were in place. Participation in the study was voluntary and entirely separate from course assessment: joining, declining, attending, not attending, or withdrawing at any point had no bearing on any participant's grade in any course, and this was stated at recruitment and again before the exit interview. Participants were told they could decline any question or withdraw their data without giving a reason and without consequence. The exit interviews were conducted by the lead author. To reduce the effect of the dual role, the interview schedule followed the SRLIS structure rather than instructor-generated prompts, participants were free to respond in Japanese or English, transcripts were de-identified before coding, and interviews were scheduled after course grades for the year had

been finalized. Coding and theme validation were carried out with co-authors who had no instructional relationship with the participants. We nevertheless acknowledge that a power differential of this kind cannot be fully eliminated, and that participants may have framed their accounts more favorably than they otherwise would.

4. RESULTS

Analysis of interview data revealed three major themes corresponding to the phases of self-regulated learning: (1) goal setting as a motivational foundation (forethought phase), (2) peer influence as the primary driver of sustained participation as well as managing structural and logistical barriers (performance phase), and (3) reported shifts toward more autonomous motivation (self-reflection phase). A further theme of holistic lifestyle changes extending beyond exercise also emerged across all phases.

4.1. Forethought Phase: Goals Drive Initial and Sustained Motivation

Participants articulated diverse goals that motivated their participation in the resistance training program. These goals extended beyond physical appearance to include health consciousness, personal accountability, and career preparation. Y.M., who had approximately one year of gym experience from high school, initially began weight training with aesthetic goals, wanting to look stronger, but developed broader health and lifestyle goals over time. He described becoming increasingly attentive to nutrition, deliberately choosing protein-rich foods over low-nutrient instant meals. This attention to diet reflected a goal framework that had expanded from appearance-focused to health-oriented.

S.A. described how his career aspirations motivated his training. As a student hoping to become a pilot, he recognized that physical fitness was a professional requirement: 'Pilots must have a strong body and mind... It's one of my motivations.' Linking exercise to broader life aspirations appeared more durable than appearance-based goals alone.

Together with career aspirations and health

consciousness, exercise motivation was embedded within broader goal hierarchies rather than existing in isolation.

K.I. expressed a similarly expansive goal orientation, noting that the program had ‘expanded my potential and the range of what I can do.’ His experience also reflected an evolution in how he understood training goals over time: initially believing that machine-based training was too advanced and that bodyweight exercises should come first, he came to understand that ‘the choice should be made based on the specific purpose and goals,’ reflecting the development of self-regulatory knowledge alongside physical competence (Zimmerman, 1989).

4.2. Performance Phase: Peer Influence as Primary Motivational Driver

The most striking finding from our analysis was the profound influence of specific peers on participants’ sustained gym attendance. Six of the ten participants (F.S., Y.O., Y.H., N.N., H.S., and S.A.) spontaneously identified a specific peer as central to their gym attendance. Two of these, F.S. and Y.O., identified Y.M. as essential to their continued participation, describing his presence or absence as the key difference maker with regard to their motivation. F.S. stated explicitly: ‘Thanks to [Y.M.], I was able to do my best at the gym, and I was taught a lot of things. If I was with Y.M., I would definitely want to go to the gym... If I couldn’t go with Y.M., I wouldn’t go.’ Y.O. expressed similar sentiments, indicating that Y.M.’s presence was the primary factor determining his own gym attendance.

Y.M. himself demonstrated extraordinary intrinsic motivation, attending almost daily and becoming an informal authority on form and nutrition for the group. His role was *senpai*-like, though all participants were in the same academic year.

This pattern of peer dependence extended beyond Y.M. Y.H. described how a friend ‘opened up everything about the gym for me’ and provided essential training tips that enabled her continued participation. This was particularly significant for Y.H., who had no prior exercise experience and reported that she ‘didn’t have any habit to do

exercise’ before the intervention. Similarly, N.N. cited Y.U. as a source of motivation: ‘I want to catch up with her... When I see a friend, I also want to try hard.’ For N.N., witnessing a peer’s progress created a sense of aspiration rather than competition, a dynamic that might be read in relation to the cultural repertoire of *hagemashiau* (mutual encouragement) rather than individual rivalry, although the interview data do not allow us to establish this as an explanation.

These peer catalyst relationships were also bidirectional. H.S. described how a friend’s invitation transformed her mandatory semester: ‘NN, she’s my friend, asked me to go training together and that makes me very happy to do training and have conversations with her. That was my motivation to do the training in this semester.’ Notably, N.N., who described her own motivation as keeping pace with Y.U., was simultaneously a catalyst for H.S., suggesting the role is emergent from relational configurations rather than residing in any individual. Y.O. corroborated a social time-extension effect: solo sessions lasted about an hour, while sessions with peers ran longer as conversation sustained engagement. F.S. captured the essence: what would most help students continue is simply ‘a friend to go with.’

S.A. similarly identified a catalyst outside the study group: a senior friend who ‘opened up everything about the gym,’ shifting him from obligatory to enthusiastic participation. His account indicates that the catalyst role was not confined to the study group.

Across these accounts, certain individuals functioned as what we term ‘social catalysts’: peers whose presence, knowledge, and encouragement were described by others as necessary for their own sustained engagement. Six of the ten participants described such a figure; the remaining four (Y.M., M.M., K.I., and Y.U.) did not. This influence operated beyond companionship: participants received practical knowledge, emotional support, and accountability. Two participants (F.S. and Y.O.) described the absence of their catalyst as likely to end their own participation, highlighting both the power and the vulnerability of peer-dependent motivation. Both reported at interview

that they had largely stopped attending during their optional phase, which they linked to Y.M. moving to a different gym. These are self-reported accounts; objective attendance records were not analyzed for this paper.

Without the external requirement, attendance became even more dependent on companion availability. Conversely, two participants (Y.M. and S.A.) reported maintaining or increasing their attendance without the requirement, which may suggest that peer dependence diminishes as autonomous motivation develops, though a sample of this size cannot establish that pattern.

4.3. Performance Phase: Managing Structural and Logistical Barriers to Exercise Adherence

Time constraints and logistical barriers consistently shaped participation. Making time for the gym was the difficulty most frequently raised in the interviews, with academic assignments, part-time employment, and extracurricular commitments cited as obstacles.

S.A. described a recurring conflict: ‘during the last semester, I felt it was really difficult to go to the gym twice a week and finish assignments.’ Physical and logistical barriers compounded these pressures: K.I. noted that ‘carrying gym clothes was a burden’ on a one-hour commute, Y.U. cited operating hours (‘the gym operating time is not available to me... I think being open late would help me’), and N.N. requested locker provision. The off-campus location of the gym was itself a friction point: when asked whether an on-campus facility would make attendance easier, one participant replied directly, ‘I want the gym on campus.’

F.S. offered perhaps the most concise articulation of these barriers: ‘Once there it was enjoyable; getting there was the problem.’ This ‘intention-behavior gap’ reflects the accumulated weight of structural barriers. K.I. captured the practical response: ‘the most important thing is to create an environment where you absolutely do it at a specific time, rather than just doing it when you can.’ Together, these observations suggest the gap is driven not by lack of desire but by structural and

scheduling constraints requiring deliberate management.

4.4. Self-Reflection Phase: Reported Shifts Toward More Autonomous Motivation

At the exit interview, several participants described in retrospect a shift from external regulation toward more autonomous forms of motivation. Because these accounts were given after the fact, they are best understood as perceived and retrospectively reconstructed shifts rather than as a developmental progression observed prospectively, and they were not uniform across the sample. S.A. articulated this transition most clearly, noting that when attendance requirements were strict, his motivation was paradoxically lower: ‘When I was required to go twice a week, my motivation was lower and it was more difficult.’ However, when given greater autonomy in deciding whether and when to attend, his intrinsic interest strengthened: ‘When I was free to go or not go, that’s when I kind of fell in love with going.’

One possible contextual reading is that this observation is notable within a Japanese educational context in which external structures and obligations (*giri*) are often described as playing a strong role in guiding behavior. That reduced external pressure coincided with greater reported enjoyment for this participant is at least consistent with the view that autonomy matters even where compliance with group expectations is valued. This study includes no cross-cultural comparison, however, so such readings are offered as possible interpretations rather than as demonstrated cultural effects.

Y.H. described a similar trajectory, beginning with concerns about fatigue interfering with academic work but developing genuine enjoyment: ‘I learned to like exercise... I didn’t think my muscles could work hard, but I realized they can be better... I was stronger than I thought.’ This discovery fostered intrinsic interest and self-efficacy, a finding of particular interest given continuing concern about physical fitness among female Japanese university students (Hirano & Masukawa, 2011).

Not all participants experienced this motivational shift with equal completeness, however. K.I.

offered a candid counter-perspective: ‘I realized I’m the type of person who won’t do something unless I’m in an environment where I feel I have to do it.’ His broader reflection: ‘unless you make time for it as an obligation, people really won’t do it’ could suggest that for some individuals, structured external requirements may function as an ongoing necessity rather than a temporary scaffold. K.I. reported that his weekly frequency decreased during his optional phase, though he described maintaining engagement across the year. His experience represents an important counterpoint to the autonomy-to-intrinsic-motivation narrative and raises questions about individual differences in self-regulatory orientation that the present sample is too small to resolve.

M.M. articulated a distinct intermediate form of motivation: ‘I went to the gym to refresh myself. I don’t want to waste my previous efforts.’ This sunk-cost reasoning sustained attendance even without external requirements or deep enjoyment, and M.M. also described improving his capacity to manage priorities across gym attendance, academic study, and part-time work.

Participants with prior exercise experience showed different motivational patterns than those new to resistance training. Y.M., who had trained for approximately one year during high school, demonstrated high intrinsic motivation from the outset. In contrast, participants without prior experience underwent more dramatic motivational shifts as they discovered benefits and developed competence. This variation is suggestive rather than conclusive. It raises the possibility that reported motivational change is most consequential for novice exercisers, a question that a larger sample would be needed to address.

4.5. Holistic Lifestyle Changes Beyond Exercise

Participants reported cascading positive changes across multiple life domains as they sustained their resistance training participation. These changes were particularly salient in the areas of nutrition, sleep, mental health, and academic performance. All of the outcomes described in this section are participants’ self-reports at the exit interview. No

dietary records, sleep measures, mental health instruments, body composition data, TOEIC scores, or course grades were analyzed for this paper, and the accounts below should be read accordingly.

Nutrition. Dietary shifts were among the most commonly reported changes. Y.M. described deliberately choosing protein-rich foods like chicken over the cup ramen and instant foods his classmates ate at lunch. Other participants similarly reported increased protein intake and more thoughtful food choices, a significant departure from eating patterns documented among Japanese university students more broadly (Praver & Roth, 2022).

K.I., whose parents prepared meals at home, noted that the study had made him ‘painfully aware that we simply don’t eat enough,’ prompting requests for more protein-dense foods. N.N. reported being ‘able to lift everything at my part-time job that I used to think was heavy,’ illustrating the functional utility of resistance training beyond aesthetic goals. She also acknowledged an unintended consequence: treating exercise as license for unrestricted eating, which she reported had increased her body fat, suggesting that explicit nutrition education should accompany training programs from the outset.

Sleep. Improvements in sleep quality were among the most frequently self-reported changes. S.A. explained: ‘After the day I went to the gym, I sleep deeply... the quality itself has improved,’ with Y.H. and H.S. describing similar experiences.

K.I. described the mechanism in direct terms: ‘I go to gym, go home, feel tired, sleep well,’ elaborating that he ‘fell asleep easily and felt more refreshed,’ with the day following exercise feeling ‘a bit lighter.’ H.S. linked her sleep improvement to emotional regulation, with better sleep increasing the days she felt ‘fairly positive.’ N.N., having internalized sleep’s role in recovery, began going to bed earlier, which improved her classroom attentiveness. These cascading effects (exercise leading to sleep quality improvement, which then enhanced daytime energy and academic engagement) suggest a self-reinforcing feedback mechanism, consistent with research identifying

exercise as a keystone behavior (Duhigg, 2012).

Mental health and stress relief. Mental health benefits emerged as a prominent theme. Y.H. explained that exercise provided an outlet for negative emotions: ‘I could target something I don’t want to do, something I don’t like when I exercise... it was a good reflection... got rid of stress and worry, anxiety.’ S.A. noted: ‘By going to the gym, I feel refreshed. Even if I have many assignments, I feel relaxed.’ And M.M. provided the most direct testimony on the mental health benefits saying, ‘I feel like gym makes my heart stronger and makes me feel positive.’ These self-reported mental health benefits are consistent with the meta-analytic evidence that resistance training reduces depressive symptoms (Gordon et al., 2018) and are notable against the high international prevalence of mental disorder among college students (Auerbach et al., 2018).

Y.U. described an unexpected benefit: intense physical focus created psychological respite, as ‘during focusing on the task at the gym, I could forget the stressful things in daily life.’ H.S. described increased psychological flexibility (*yoyu*): consistent training created more mental breathing room, reducing the feeling of being overwhelmed.

Academic performance. Several participants reported perceived improvements in academic performance and focus. Y.H. described improved concentration: ‘I could focus. I didn’t feel sleepy or bored for the class... New minds come to me.’ Y.M. reported that regular training combined with creatine supplementation improved his vocabulary recall in both Japanese and English. While these self-reports require caution in interpretation, they are consistent with research demonstrating that physical exercise improves neuroplasticity and cognitive function (Erickson et al., 2011; Hillman et al., 2008; Hötting & Röder, 2013).

N.N. provided a concrete account of the physical mechanism linking exercise to study: prior to the intervention, her long daily commute left her too fatigued to study upon returning home. Following regular training, she reported that she no longer felt sleepy after commuting and was able to use that

time productively. Y.O. drew an explicit connection between improved classroom concentration and language development, observing that ‘by being able to concentrate more in class, I think it’s also connected to my English ability.’ For students in a foreign studies program where sustained attention is integral to language acquisition, this indirect effect on academic outcomes strengthens the case for institutional support.

5. DISCUSSION

Findings reveal three contributions: (1) the emergence of ‘social catalyst’ individuals as a more powerful motivational force than previously recognized; (2) the significance of structural and logistical barriers to exercise adherence; and (3) participants’ retrospective reports of a shift from more controlled toward more autonomous regulation, particularly when autonomy increased.

5.1. Peer Influence as a Primary Driver of Exercise Adherence

Our findings extend research on peer influence by showing the profound impact specific individuals can have as ‘social catalysts.’ Unlike prior studies documenting general peer support benefits (Rackow et al., 2015), our data show that for six of the ten participants, sustained attendance was described as contingent on a particular peer. F.S.’s statement, ‘If I couldn’t go with Y.M., I wouldn’t go,’ exemplifies this dependency, suggesting that for some individuals peer influence may operate not merely as a facilitator but as something closer to a necessary condition for adherence. We advance this as a hypothesis generated by a small bounded case rather than as an established regularity.

One possible contextual explanation is Japan’s frequently described collectivist orientation and interdependent self-construal (Markus & Kitayama, 1991). The cultural concepts of *amae* (dependence on others’ benevolence) and *wa* (group harmony) offer one vocabulary for describing why peer presence mattered so much to these participants, and are broadly consistent with Triandis’s (1995) account of conformity to group norms in

collectivist settings. We stress, however, that this study drew on a single cohort at one Japanese university and included no cross-cultural comparison. These cultural concepts are therefore offered as possible contextual interpretations of what participants described, not as demonstrated causes of their behavior, and the mechanisms the participants actually described (practical guidance, accountability, and companionship) are not specific to Japan.

Effective catalysts showed intrinsic motivation, domain knowledge, and willingness to share expertise. Y.M. exemplified these qualities, aligning with Social Cognitive Theory's emphasis on modeling (Bandura, 1986), though the relationship extended beyond observation to active coaching, emotional support, and accountability. His role resembled an informal *senpai* (senior mentor), despite all participants being in the same year, suggesting that demonstrated commitment and expertise, rather than age, can establish mentorship dynamics.

From an SRL perspective, social catalysts scaffold others' goal setting, strategy selection, progress monitoring, and motivation maintenance, a function particularly important for novices. However, the vulnerability of peer-dependent motivation warrants attention; program designers should help participants develop autonomous motivation alongside peer support, rather than allowing complete dependence on specific individuals.

5.2. Managing Structural and Logistical Barriers to Exercise Adherence

F.S.'s observation that exercise was reliably enjoyable once initiated but consistently difficult to begin captures the structural barriers (time conflicts, off-campus access, equipment transport) shaping many participants' experience.

Competing academic and employment demands were consistently identified as obstacles, compounded by the gym's off-campus location, limited storage, and restricted hours. Adherence may depend as much on reducing logistical friction as on motivational support. Lowering the operational friction of initiating physical activity

therefore appears to be an important design consideration.

5.3. Reported Movement Toward More Autonomous Motivation

Participants' reports of movement from controlled toward autonomous motivation are consistent with SDT's proposition that satisfying competence, autonomy, and relatedness facilitates internalization of extrinsic behaviors (Deci & Ryan, 2000). S.A.'s observation that reduced external requirements paradoxically increased his motivation, 'when you were free to go or not go, that's when you kind of fell in love with going' illustrates the potential role of autonomy support. It is, however, a single retrospective account, and K.I.'s contrasting experience shows that the pattern was not general across the sample.

The reported lifestyle changes (improved nutrition, sleep, stress management, and academic performance) appeared to create feedback loops reinforcing exercise motivation, consistent with research on 'keystone habits' (Duhigg, 2012).

5.4. Implications for Practice

Our findings suggest several recommendations for Japanese university physical activity programs.

First, program designers should intentionally facilitate peer networks. Buddy systems, small group assignments, or peer mentoring could help participants connect with motivational anchors; leveraging existing structures such as *zemi* (seminar) groups offers natural frameworks for peer support.

Second, programs should explicitly teach motivational self-regulation strategies, including scheduling gym attendance as a fixed commitment, managing competing demands proactively, and navigating motivational fluctuations.

Third, a phased approach moving from required to recommended to optional attendance may support autonomy development while providing the scaffolding novice exercisers need.

Fourth, programs should help participants recognize the holistic benefits of exercise beyond appearance, framing it as supporting academic and

career success.

5.5. Limitations and Future Research

As a qualitative case study with 10 participants at a single Japanese university, findings may not generalize. The small, self-selected sample and gender distribution (6 men, 4 women) further constrain transferability. Three further limitations warrant emphasis. First, all findings rest on retrospective exit interviews; participants' accounts of how their motivation changed are reconstructions offered at the end of the year rather than observations recorded as change occurred. Second, no quantitative measures were analyzed in this paper, so all reported outcomes in nutrition, sleep, mental health, and academic performance are self-reports and should not be read as objectively verified. Third, the cultural concepts invoked in the Discussion are interpretive resources drawn from the literature rather than variables tested here; with a single cohort at one institution and no comparison group, this study cannot establish that the patterns observed are culturally specific.

Future research should examine peer influence across larger, more diverse samples, investigate support for students lacking social catalysts, and pursue longitudinal and intervention studies of structural supports (on-campus facilities, flexible scheduling, equipment storage) alongside motivational strategies to establish causality.

6. CONCLUSION

This study reveals the interplay of peer influence, motivational evolution, and self-regulatory strategies shaping Japanese university students' engagement with resistance training. The identification of 'social catalysts' (peers whose presence is experienced as essential) highlights both the power and the fragility of peer-dependent motivation in this setting. Structural and logistical barriers represent significant impediments, indicating that program effectiveness depends as much on reducing structural friction as on building intrinsic motivation. Several participants' retrospective reports of movement toward more autonomous motivation, particularly when

autonomy support increased, point to the value of program design that scaffolds toward autonomous regulation, while one participant's continued reliance on external structure indicates that this trajectory is not universal.

DATA AVAILABILITY

Due to the qualitative nature of the data and the inclusion of potentially identifiable participant information, the full interview transcripts are not publicly available. De-identified excerpts supporting the findings are included within the manuscript. Additional anonymized data may be made available by the corresponding author upon reasonable request and subject to ethical approval.

USE OF ARTIFICIAL INTELLIGENCE

During the preparation of this manuscript, the authors made limited use of generative AI tools to assist with language editing and formatting. All research design, analysis, and interpretation remain the authors' own, and the authors reviewed the output and take full responsibility for the final content.

REFERENCES

- Aira, T., Vasankari, T., Heinonen, O. J., Korpelainen, R., Kotkajuri, J., Parkkari, J., Savonen, K., Uusitalo, A., Valtonen, M., Villberg, J., Vähä-Ypyä, H., & Kokko, S. P. (2021). Physical activity from adolescence to young adulthood: patterns of change, and their associations with activity domains and sedentary time. *International Journal of Behavioral Nutrition and Physical Activity*, 18(1), 85. <https://doi.org/10.1186/s12966-021-01130-x>
- Auerbach, R. P., Mortier, P., Bruffaerts, R., Alonso, J., Benjet, C., Cuijpers, P., Demyttenaere, K., Ebert, D. D., Green, J. G., Hasking, P., Murray, E., Nock, M. K., Pinder-Amaker, S., Sampson, N. A., Stein, D. J., Vilagut, G., Zaslavsky, A. M., Kessler, R. C., & WHO WMH-ICS Collaborators. (2018). WHO World Mental Health Surveys International College Student Project: Prevalence and distribution of mental disorders. *Journal of Abnormal Psychology*, 127(7), 623–638. <https://doi.org/10.1037/abn0000362>

- Bandura, A. (1986). *Social foundations of thought and action: A social cognitive theory*. Prentice-Hall.
- Carpinelli, R. N., & Otto, R. M. (1998). Strength training: Single versus multiple sets. *Sports Medicine*, 26(2), 73–84.
<https://doi.org/10.2165/00007256-199826020-00002>
- Carron, A. V., Hausenblas, H. A., & Mack, D. (1996). Social influence and exercise: A meta-analysis. *Journal of Sport and Exercise Psychology*, 18(1), 1–16.
<https://doi.org/10.1123/jsep.18.1.1>
- Cleary, T. J., & Russo, M. R. (2024). A multilevel framework for assessing self-regulated learning in school contexts: Innovations, challenges, and future directions. *Psychology in the Schools*, 61(1), 80–102.
<https://doi.org/10.1002/pits.23035>
- Creswell, J. W., & Creswell, J. D. (2018). *Research design: Qualitative, quantitative, and mixed methods approaches* (5th ed.). SAGE Publications.
- Deci, E. L., & Ryan, R. M. (2000). The “what” and “why” of goal pursuits: Human needs and the self-determination of behavior. *Psychological Inquiry*, 11(4), 227–268.
https://doi.org/10.1207/S15327965PLI1104_01
- Deliens, T., Deforche, B., De Bourdeaudhuij, I., & Clarys, P. (2015). Determinants of physical activity and sedentary behaviour in university students: A qualitative study using focus group discussions. *BMC Public Health*, 15, Article 201. <https://doi.org/10.1186/s12889-015-1553-4>
- Di Bartolomeo, G., & Papa, S. (2019). The Effects of Physical Activity on Social Interactions: The Case of Trust and Trustworthiness. *Journal of Sports Economics*, 20(1), 50–71.
<https://doi.org/10.1177/1527002517717299>
- Duhigg, C. (2012). *The power of habit: Why we do what we do in life and business*. Random House.
- Erickson, K. I., Voss, M. W., Prakash, R. S., Basak, C., Szabo, A., Chaddock, L., Kim, J. S., Heo, S., Alves, H., White, S. M., Wojcicki, T. R., Mailey, E., Vieira, V. J., Martin, S. A., Pence, B. D., Woods, J. A., McAuley, E., & Kramer, A. F. (2011). Exercise training increases size of hippocampus and improves memory. *Proceedings of the National Academy of Sciences*, 108(7), 3017–3022.
<https://doi.org/10.1073/pnas.1015950108>
- Fitzgerald, A., Fitzgerald, N., & Aherne, C. (2012). Do peers matter? A review of peer and/or friends’ influence on physical activity among American adolescents. *Journal of Adolescence*, 35(4), 941–958.
<https://doi.org/10.1016/j.adolescence.2012.01.002>
- Gordon, B. R., McDowell, C. P., Hallgren, M., Meyer, J. D., Lyons, M., & Herring, M. P. (2018). Association of efficacy of resistance exercise training with depressive symptoms: Meta-analysis and meta-regression analysis of randomized clinical trials. *JAMA Psychiatry*, 75(6), 566–576.
<https://doi.org/10.1001/jamapsychiatry.2018.0572>
- Greene, J. A. (2017). *Self-regulation in education*. Routledge.
- Hillman, C. H., Erickson, K. I., & Kramer, A. F. (2008). Be smart, exercise your heart: Exercise effects on brain and cognition. *Nature Reviews Neuroscience*, 9(1), 58–65.
<https://doi.org/10.1038/nrn2298>
- Hirano, Y., & Masukawa, M. (2011). A study of physical fitness measurement in female university students: An analysis with morphological measurement [女子大学生の体力測定に関する一考察：形態測定との分析から]. *Otsuma Journal of Home Economics*, 47, 127–134.
- Hötting, K., & Röder, B. (2013). Beneficial effects of physical exercise on neuroplasticity and cognition. *Neuroscience & Biobehavioral Reviews*, 37(9), 2243–2257.
<https://doi.org/10.1016/j.neubiorev.2013.04.005>
- Ikegami, N., & Rice, T. (2023). Japan’s health care system: Containing costs in an aging society. *Health Affairs*, 42(5), 691–698.
<https://doi.org/10.1377/hlthaff.2022.00700>
- Keating, X. D., Guan, J., Piñero, J. C., & Bridges, D. M. (2005). A meta-analysis of college students’ physical activity behaviors. *Journal of American College Health*, 54(2), 116–126.
<https://doi.org/10.3200/JACH.54.2.116-126>
- Kwan, M. Y., Cairney, J., Faulkner, G. E., &

- Pullenayegum, E. E. (2012). Physical activity and other health-risk behaviors during the transition into early adulthood: A longitudinal cohort study. *American Journal of Preventive Medicine*, 42(1), 14–20.
<https://doi.org/10.1016/j.amepre.2011.08.026>
- Layder, D. (1998). *Sociological practice: Linking theory and social research*. SAGE Publications.
- Mainichi Japan. (2020, October 12). Physical fitness of Japanese youth continues long-term decline. *Mainichi Shimbun*.
<https://mainichi.jp/english/articles/20201019/p2a/00m/0na/012000c>
- Markus, H. R., & Kitayama, S. (1991). Culture and the self: Implications for cognition, emotion, and motivation. *Psychological Review*, 98(2), 224–253.
<https://doi.org/10.1037/0033-295X.98.2.224>
- O'Connor, P. J., Herring, M. P., & Carvalho, A. (2010). Mental health benefits of strength training in adults. *American Journal of Lifestyle Medicine*, 4(5), 377–396.
<https://doi.org/10.1177/1559827610368771>
- Okazaki, K., Suzuki, K., Sakamoto, Y., & Sasaki, K. (2023). Increase in underweight young adult population in Japan due to the COVID-19 pandemic: A repeated cross-sectional survey analysis. *Psychiatry and Clinical Neurosciences*, 77(10), 550–551.
<https://doi.org/10.1111/pcn.13583>
- Panadero, E. (2017). A review of self-regulated learning: Six models and four directions for research. *Frontiers in Psychology*, 8, Article 422. <https://doi.org/10.3389/fpsyg.2017.00422>
- Praver, M., & Roth, I. M. (2022). Exercise, nutrition, and sleep: The knowledge and practices of Japanese university students. *Meijo University Faculty of Foreign Studies Bulletin*, 5(1), 53–63.
- Praver, M., & Roth, I. M. (2024). The case for integrated and comprehensive physical fitness programs at Japanese universities. *Meijo University Bulletin of Humanities*, 59(2), 1–18.
- Rackow, P., Scholz, U., & Hornung, R. (2015). Received social support and exercising: An intervention study to test the enabling hypothesis. *British Journal of Health Psychology*, 20(4), 763–776.
<https://doi.org/10.1111/bjhp.12139>
- Radel, R., Pelletier, L., Pjevac, D., & Cheval, B. (2017). The links between self-determined motivations and behavioral automaticity in a variety of real-life behaviors. *Motivation and Emotion*, 41(4), 443–454.
<https://doi.org/10.1007/s11031-017-9618-6>
- Roth, I. M., & Praver, M. (2021). Freshman fitness: A literature review of health and well-being among Japanese university students. *Meijo University Bulletin of Humanities*, 57(1), 1–12.
- Roth, I. M., & Praver, M. (2023). Healthy habits: A 28-day health awareness challenge. *Meijo University Faculty of Foreign Studies Bulletin*, 6(1), 75–84.
- Roth, I. M., & Praver, M. (2025). Practical resistance training guidelines for Japanese university students. *Meijo University Bulletin of Humanities*, 60(3), 49–58.
- Ryan, R. M., & Deci, E. L. (2017). *Self-determination theory: Basic psychological needs in motivation, development, and wellness*. Guilford Press.
- Saint-Maurice, P. F., Troiano, R. P., Bassett, D. R., Graubard, I. B., Carlson, S. A., Shiroma, E. J., Fulton, J. E., & Matthews, C. E. (2020). Association of daily step count and step intensity with mortality among US adults. *JAMA*, 323(12), 1151–1160.
<https://doi.org/10.1001/jama.2020.1382>
- Shimokado, H., Nakata, Y., Tomikawa, M., Takagi, H., & Soya, H. (2013). Secular trends in body shape and physical fitness of university students over 26 years and their relationship [大学生における26年間の体型と体力の推移とその関連性]. *Japanese Journal of Physical Education, Health and Sport Sciences*, 58(1), 181–194.
<https://doi.org/10.5432/jjpehss.12031>
- Sperandei, S., Vieira, M. C., & Reis, A. C. (2016). Adherence to physical activity in an unsupervised setting: Explanatory variables for high attrition rates among fitness center members. *Journal of Science and Medicine in Sport*, 19(11), 916–920.
<https://doi.org/10.1016/j.jsams.2015.12.522>
- Stevens, M., Rees, T., Coffee, P., Steffens, N. K., Haslam, S. A., & Polman, R. (2017). A social identity approach to understanding and promoting physical activity. *Sports Medicine*, 47(8), 1781–1795.

<https://doi.org/10.1007/s40279-017-0720-4>

Tamura, A., Shimura, K., & Inoue, Y. (2021). A survey of health awareness and physical activity among Japanese undergraduate rehabilitation students. *Journal of Physical Therapy Science*, 33(2), 106–111.

<https://doi.org/10.1589/jpts.33.106>

Teixeira, P. J., Carraça, E. V., Markland, D., Silva, M. N., & Ryan, R. M. (2012). Exercise, physical activity, and self-determination theory: A systematic review. *International Journal of Behavioral Nutrition and Physical Activity*, 9, Article 78.

<https://doi.org/10.1186/1479-5868-9-78>

Triandis, H. C. (1995). *Individualism and collectivism*. Westview Press.

Vanhelst, J., Béghin, L., Drumez, E., Labreuche, J., Polito, A., De Ruyter, T., Censi, L., Ferrari, M., Miguel-Berges, M. L., Michels, N., De Henauw, S., Moreno, L. A., & Gottrand, F. (2023). Changes in physical activity patterns from adolescence to young adulthood: The BELINDA study. *European Journal of Pediatrics*, 182(6), 2891–2902.

<https://doi.org/10.1007/s00431-023-04948-8>

Wei, C. N., Harada, K., Ueda, K., Fukumoto, K., Minamoto, K., & Ueda, A. (2011). Assessment of health-promoting lifestyle profile in Japanese university students. *Environmental Health and Preventive Medicine*, 17(3), 222–227. <https://doi.org/10.1007/s12199-011-0244-8>

Westcott, W. L., Winett, R. A., Anderson, E. S., Wojcik, J. R., Loud, R. L., Cleggett, E., & Glover, S. (2001). Effects of regular and slow speed resistance training on muscle strength. *The Journal of Sports Medicine and Physical Fitness*, 41(2), 154–158.

Yin, R. K. (2003). *Case study research: Design and methods* (3rd ed.). SAGE Publications.

Zimmerman, B. J. (1989). A social cognitive view of self-regulated academic learning. *Journal of Educational Psychology*, 81(3), 329–339. <https://doi.org/10.1037/0022-0663.81.3.329>

Zimmerman, B. J., & Kitsantas, A. (1997). Developmental phases in self-regulation: Shifting from process goals to outcome goals. *Journal of Educational Psychology*, 89(1), 29–36. <https://doi.org/10.1037/0022-0663.89.1.29>

Zimmerman, B. J., & Pons, M. M. (1986).

Development of a structured interview for assessing student use of self-regulated learning strategies. *American Educational Research Journal*, 23(4), 614–628.

<https://doi.org/10.3102/00028312023004614>

This page was intentionally left blank



Policymaking in the Era of Internationalizing Universities

Christopher G. HASWELL

Associate Professor, Kyushu University, Faculty of Languages and Cultures

FUTUREd, Volume 1, Issue 2 (2026)

Pages: 140 - 150

ISSN: 2760-8263 (print)

ISSN: 2760-8271 (online)

Keywords:

university internationalization,
policymaking, institutional identity,
evaluation metrics, modernity,
sustainability

Corresponding author(s):

Christopher G. Haswell
haswell@flc.kyuhsu-u.ac.jp



Abstract: Universities involved in internationalizing their institutions will be aware of the difficulties of making the correct determinations when considering the short-, medium-, and long-term effectiveness of their policies. Much like other institutions required to change their practices in the modern age, the scope of university policymaking is constrained by the market within which they ostensibly intend to thrive. The trilemma outlined in this paper involves universities making decisions based on three interlinked yet asymmetrically influential factors: identity, modernity, and sustainability. This paper discusses how these three factors influence all universities, albeit to differing degrees at different times. This paper argues for a contextually based approach to university internationalization, fully informed by the various influences on stakeholders in the system, to produce outcomes that can be of lasting benefit for individuals, institutions, and international systems alike.

1. INTRODUCTION

One imagined representation of the classic ‘three-body problem’ is a figure-eight: three bodies with independent gravity running in loops, moving closer and further apart but returning through the loop to once again influence each other’s movements in a varying, ever-changing, and, some say, unpredictable way. The three-body problem is a useful image for considering any institutional decision-making process, as it requires viewing the decision as an interconnected series of events rather than a single point in time, with influences of varying importance interacting in context. Unlike the process described in the scientific allegory used in this introduction, decision-

influencing events in an institutional setting like a university do not occur in a vacuum.

The asymmetric trilemma at the core of this paper was covered in the research project “A comparative investigation of internationalized universities in Japan and the United Kingdom through the lens of English as a Lingua Franca” undertaken from spring 2024 to summer 2026. This project began as an academic exercise looking into patterns of use of English as a lingua franca in linguistic interactions in contexts such as universities, specifically publication of research, evaluation of student competency, and the development of an internationalized university campus environment. The project developed into a comparative

investigation of universities in Japan and the United Kingdom and the experiences of students, faculty, and staff of the process of internationalization in universities.

The three interconnected yet unpredictable factors operating within the system of internationalized universities were identity, modernity, and sustainability: identity was defined as any motivation for a decision that stemmed from an internally held belief, or that was motivated by the publicly stated promotion of an individual's or institution's character; modernity was defined as factors judged to make a person or institution 'good,' worthy of support or patronage, and/or conforming to expectations of the modern age; sustainability is a longitudinal metric of success or otherwise, which cannot be promised at the time of any decision, and remains frustratingly something that must be experienced going forward yet is often only understood when viewed in reverse.

For universities, the number of stakeholders is as high as in any institution, with hundreds, and potentially thousands, of employees, but it differs from a business in that its 'customers' form a short-term population rather than a consumer base. Most university students study for 3-4 years at the undergraduate level, depending on the location, and then for 1-7 years at the postgraduate level, depending on their respective courses. Simultaneously, students are both the customers of the institution and its product, the proof of the effect the university has had upon its on-campus populace. For this reason, although the university ostensibly exists only for the education of its students, students cannot be considered customers in the same way that almost any business would view those who consume its products or services.

The stakeholders in university decision-making include, but are not limited to, the students, their families, their instructors, course administrators, university administrators, senior management, associated sponsor businesses and future employers, and government officials and ministers. Every one of these people will either pay for, benefit from, be subject to, or otherwise be affected by decisions made by any of the others. For this reason, to audit universities' decisions correctly, we

must consider the metrics by which their outcomes are judged. Here, metrics are taken to mean scales of evaluation. They are important to keep in mind because all decisions are open to scrutiny both internally and externally; the question is how success is determined.

Because the stakeholder scope for university decisions regarding internationalization is so wide, the metrics we consider span from individual and personal effects through the institutional level to national and international levels. Therefore, multiple evaluation systems should be considered, with the most relevant parts extracted to form a focused evaluation system. The purpose of this concept paper is not to propose an evaluation system but to begin the discussion of what such a system could look like.

2. EVALUATION METRICS

2.1 Metrics of identity

As stated previously, identity is self-defined. To make the distinction between identity and modernity in economic terms, one's identity is a personally determined moral metric and modernity is an externally defined social metric. One example of an identity metric is the aggregate judgment of character. In her 2014 book "The Culture Map," Erin Meyer used eight scales calibrated using frameworks developed by INSEAD, an international business school located in France. As shown in Chart 1, the eight scales are communicating, evaluating, persuading, leading, deciding, trusting, disagreeing, and scheduling (Meyer, 2014). Using Japan and the United Kingdom as examples, along with the Culture Map metrics, we can compare the two countries (also see Chart 1 in the Appendix). The descriptors can be used for institutional identity as well as personal identity, which means we can address one of the first challenges for institutions like universities: how can institutions appeal to individuals? If Japanese people are high-context communicators, preferring principled leaders and consensus-based decision-makers, and universities want to appeal to these students, they could tailor their visible identities and promotional images to match these expectations; if people from the UK prefer mid- to

low-context communication, a more application-first leadership style, with more egalitarian decision-making, universities are free to encourage such students. From this perspective, we can apply an external judgment on who universities say they are, i.e. how they self-identify in their advertising literature, and consider which institutions might be a good match for certain individuals.

Universities make ‘identity appeals’ to prospective students by publishing mission statements on their websites and online. We can judge their success (or otherwise) by the extent to which they connect the university’s stated aims with those of student prospects who use them to decide where to study. Given here are examples from Japanese and United Kingdom universities used in the investigation from which this paper is derived:

Kyushu University, Fukuoka, Japan

Kyushu University, in line with its VISION 2030 to become a university that drives social transformation through comprehensive knowledge, has set forth the goals of “cultivating value-creating individuals who can thrive globally” and “nurturing leaders for the international community by becoming a hub for international brain circulation through global collaboration.” [O]bjectives include “expanding the acceptance of outstanding international students and increasing diverse overseas dispatches of students in conjunction with education and research,” “creating new international collaboration projects with leading overseas universities to strengthen our international research and educational capabilities,” and “promoting the internationalization of our campus.”

Kyushu University International
Education Navigation Center

Lakeland University, Tokyo, Japan

Lakeland University educates individuals of diverse backgrounds, preparing them to think critically, to communicate effectively, to succeed professionally, and to lead ethical, purposeful, and fulfilling lives.

Rooted in the values of the United Church of Christ, Lakeland integrates the liberal arts and experiential learning to develop the whole person for success in a dynamic, multi-faceted world.

Lakeland Mission and Values

Get an authentic American education in the heart of downtown Tokyo. It’s the best of both worlds — experience life in Japan while receiving top-tier instruction alongside students from all over the world.

Lakeland About

University of St. Andrews, Fife, Scotland

Global St Andrews will play a key role in bringing together staff, students, alumni, and other stakeholders to contribute to the broad range of our international activities, promoting our global brand, and developing our engagement worldwide. We will draw staff and students from across the world to visit and work with us because of our welcoming and cosmopolitan scholarly community.

St. Andrews Global

University of Southampton, Hampshire, England

The University of Southampton is a partner of choice for many global leading higher education, industry, government, and funding institutions. Through our partners, our students and staff have global reach and impact, influencing opinion formers and policymakers, carrying out innovative and world-leading research, gaining valuable international experience, and accessing sustainable sources of funding.

Southampton Global Partnerships

Words such as ‘outstanding,’ ‘diverse,’ ‘ethical, purposeful and fulfilling,’ combined with ‘authentic,’ ‘cosmopolitan,’ ‘global,’ and

‘innovative’ are intended to evoke in prospective students a personal ambition to be part of these academic communities. “I could be that!” or even “That’s me! I’m just like that!” are the reactions universities want to engender as young people with an academic goal read their promotional literature. To quote Simon Sinek, “The goal of business should not be to do business with anyone who simply wants what you have. It should be to focus on the people who believe what you believe” (Sinek, 2009). By deciding upon and publicly defining their identity, universities can appeal to their prospective student customers.

These mission statements were specifically identified as relating to the universities’ goals for internationalization, but this appeal is for both international and domestic students: if the student identifies as outstanding, purposeful, and having international interests for their future career, why would they not be interested in pursuing a degree from one of these or other internationalizing universities? Even if they are not interested in a career overseas or postgraduate studies, their 3–4 years at university will surely be positively affected by a sizeable international student cohort. These mission statements also show both current specifics and references to ongoing university policies, demonstrating an appreciation of modernity and an appeal to the sustainability of the university’s image over time; an example of these factors intervening on the stated appeal of the university.

Having determined and declared a clear identity their identity, universities should, as far as possible, retain it. If the student experience does not meet the expectations set by the identity appeal, they could transfer to complete their studies somewhere they feel is better aligned with their aims, or, at the very least, provide negative feedback that will affect the decisions of other prospective students. As we shall see when considering modernity and sustainability, identity could be the first factor to suffer under external pressure to modernize to conform to the current order and/or remain competitive in the student market. A university without an identity could find itself folding to external pressures; in addition, forsaking self-determined values for

medium-term sustainability could leave an institution being deemed unsuitable for a student to join or a company to invest in.

Until now, we have been looking at how institutions and individual stakeholders view themselves. Looking specifically at institutional activities using external identity judgment metrics, we can consider frames such as the Hofstede ‘six dimensions’ proposed by the Culture Factor Group, which was conducted across 60 countries, and the GLOBE Study/Project, which was conducted in over 150 countries. The indicators of the two agencies are given in Chart 2 in the Appendix. These are examples in the private sector of the monetizing of anthropological frames to create institutional and national personality profiles. These dimensions are alternatives to the ‘Culture Map’ as they come closer to identifying how an institution is viewed as distinct from an individual within the institution and the nation within which the institution resides.

At this point, we can observe themes emerging in identity metrics. These themes, broadly stated, are interconnectedness, motivation, and temporality. Interconnectedness covers communication styles and cooperativeness, how we speak together and how we act together. Motivation encompasses competitive elements, such as internal or extrinsic motivating factors, and an orientation towards performance over process. Temporality is long- and short-term thinking and current or future orientation. These are all indicators of identity-related judgment. They are relevant here because any institution seeking to do business with a customer or form a connection with a prospective partner (or even assess the proclivities of any stakeholder) needs a frame of reference: “Is this someone with whom I can conduct productive business?”

Metrics of identity are generally internally defined but can be evaluated externally. They are how any stakeholder in the system, regardless of size, can place themselves and their actions relative to another stakeholder. They can help determine the value of that player in the system, what qualities these players bring to the process being undertaken, and make predictions about how well these

personalities might work together.

2.2 Metrics of modernity

Having established who universities are or, at best, who they say they are, we can then consider what they do in relation to the expectations we have of them in the modern era. We can say that metrics of modernity demonstrate how closely aligned any given institution is with expectations of the other stakeholder in the system. While a well-established identity is unlikely to change dramatically in short periods of time, expectations of adherence to current ideologies can require high-stakes policy changes in a compressed time frame. Because of this temporal influence, identities are rarely static when modern motivators are added to the decision-making process.

The United Nations' (UN) 'Sustainable Development Goals' (SDGs) (2015) comprise 17 goals with 169 targets, covering a wide range of indicators the UN has deemed appropriate for evaluating the activities of companies, institutions, charities, and NGOs around the world. Not all goals are relevant to every institution (in reality, only a few are relevant to any single institution), but they serve as indicators of what can be done if an institution is in the right field of influence. For example, a university will not be able to affect Goal 1, "No Poverty" but could work towards Goal 2, "Zero Hunger" specifically target 2.3 which is "By 2030, double the agricultural productivity and incomes of small-scale food producers" (United Nations, 2015) and Goal 3 "Good Health and Well-Being" specifically target 3.b which is to "Support the research and development of vaccines and medicines for the communicable and non-communicable diseases that primarily affect developing countries," (United Nations, 2015) both of which targets could be assisted by working on research into those areas from the relevant university faculties. For this reason of context-specific relevance, institutional efforts relating to SDGs are usually advertised in a targeted way to emphasize the positive impact of a new policy direction.

The only bodies that might be beholden to all SDGs are national or transnational entities, such as

nation-states or groups like the Association of South East Asian Nations (ASEAN) or the United Nations itself. SDGs cover such a wide range of potential activities that only entities with broad responsibilities might need to always consider all SDGs, though for different activities. For this reason, we can consider the SDGs to be of limited relevance to individual universities' policy making. However, because universities are beholden to national policy in the wider consideration of university stakeholders, they must be aware of the SDGs existence and potential relevance to their contributions to the national whole.

SDGs intersect with the metrics of identity and sustainability in a very specific way. We can see that the SDGs are not, despite their name, metrics of sustainability: because so many of them are ideological, they are modernity metrics. They can be defined as external and social rather than related to financial sustainability. In addition, if the ideology of the SDG(s) does not align with the identity of the university, there may be a decision-making impasse that has to be broken by an appeal to the university's individualism; identity could conflict with modernity. Referring to individual Japanese universities' mission statements, we can find examples of them expressing their independent spirit:

Kyoto University: *"Kyoto University states its mission to sustain and develop its historical commitment to academic freedom."*

Tohoku University: *"Tohoku's core character is historically tied to its progressive founding principles."*

Osaka University: *"The university has from its birth inherited the spirit of the citizens of Osaka."*

Tokyo IoT University: *"Every organizational unit has goals and values of its own, while sharing the common goals of the Institute."*

Kyushu: *"...the university's brand—its unique strengths and principles..."*

Waseda: *"Waseda University holds as its*

founding principles the preservation of the independence of scholarship...”

Keio: *“The basic spirit of Keio University is that of independence and self-respect...”*

Are these ideals compatible with the ethos of the SDGs in general, which is the standardization of actions of all people under the UN remit? Could some universities, regardless of location, find themselves ethically at odds with one or more of the SDGs as they strive for academic excellence and the freedom to explore the avenues of research they deem necessary?

I raise this question of institutional independence from the metrics of modernity not because I have any personal moral questions about the SDGs. However, I am concerned that universities (or any non-national institution, for that matter) with a self-identified interest in independent action or thought could find themselves questioning either their commitment to their identity and/or the importance of being judged relative to the transnational standards of the age, standards that are always subject to change over a long enough timeframe.

The best-known metrics used by universities for internationalization are ones often quoted in their promotional materials: Times Higher Education (THE) and Quacquarelli Symonds (QS). These two agencies develop rating methodologies that have influenced universities' decisions for decades. Beginning as a joint enterprise in 2004, the QS and THE rankings have been separate entities since 2010 (Hou & Jacob, 2017, Fauzi, et. al. 2020). Their methodologies have changed several times over the past 15 years, and they currently evaluate universities using the metrics shown in Table 3 of the Appendix.

As shown in the descriptors and their respective weightings, the QS rankings consider universities' activities holistically, including post-graduation student performance as an indicator of overall university success, whereas THE rankings focus more on the university as an educator and hub of education. The THE methodology is also more granular, with 17 sub descriptors forming its ranking metrics, compared to the QS ranking's 9. The differences between the two methodologies,

when placed side by side, clearly demonstrate the importance of the questions “What is being measured?” and “How is it being measured?” Charts 4 and 5 in the Appendix include figures for the top 5 universities in the QS and THE rankings in Japan and the UK.

The first thing one notices is that the top 5 ranked universities are the same in both rankings, but in a different order. From this, we can conclude that, according to the metrics, these are the best universities in the country, but that they are being measured differently. The latter point we already knew from looking at Chart 3, but that different methodologies arrive at rankings that are close to the same suggests that the underlying motivations are similar. This is again not surprising, as the underlying metrics are derived from the same original source; the development of the ranking methodologies since the division in 2010 has led to noticeable but not hugely different outcomes.

As mentioned before, the QS ranking incentivizes universities to pay more attention to the performance of their students post-graduation, meaning that universities can leverage the employability of their students and their performance in their careers as a way of promoting their university to future potential students, preferring to focus on improving current and future performance over past reputation. This means, by definition, universities being guided by international ranking metrics are trading on their current and future performance, not their historical image.

2.3 Metrics of sustainability

When the question for universities is about sustainability, the answer becomes much more difficult. One might think the main question is “Does the institution exist?” and, if the answer is ‘yes,’ the relevant follow-up question is “For how long the institution has existed?” However, neither current existence nor long-term existence is an indicator of future existence: having existed as far as today is no guarantee of a prosperous tomorrow.

As much as the acronym SDG includes the word ‘sustainable,’ none of the goals predict long-term sustainability: national- or institutional-level

efforts do not guarantee success, even when they align with relevant SDGs.

Usual metrics of judging sustainability might be simply mathematical, such as an operating reserve ratio (net assets/monthly fixed costs) when judged against a yearly average, i.e., relative to our historical operational costs: how long can we continue to operate in this financial situation? As universities can plan only around the students they can readily predict, unlike companies that might have to scale up or down quickly based on an ever-changing customer base, metrics like retention rate (repeat constituents over total constituents) would not yield accurate predictions of future success. Regardless of what universities do, when one considers domestic recruitment, their future potential students in two decades' time have already been born. The only question that remains is which universities can remain, even with a strong intention of surviving.

One metric of institutional sustainability we could look at is the 4% weighting from the QS rankings given to 'Sustainability.' The QS website states, "Sustainability is an increasingly important issue for students when picking a study destination, and QS is proud to be the first major university ranking provider to include it as an indicator in our core rankings" (QS, 2026). QS is explicitly tying sustainability metrics to the university's identity. Here is what QS says about what makes up this metric:

- *The Sustainability (SUS) indicator highlights which institutions are demonstrating a commitment to a more sustainable existence and encompasses a variety of factors across environmental, social and governance (ESG).*
- *This includes everything from environmental projects on campus, through to diversity initiatives, institutional governance, and the impact of academic research across the UN's 17 sustainable development goals (SDGs).*
- *It evaluates the social and environmental impact of universities as not only centres of education and research, but also as major employers.*

QS World University Rankings: Methodology 'Sustainability'

These considerations for scoring 'sustainability' suggest that what is being judged is what is being done now to improve the university's image and drive recruitment, using an ideological moral framing. We can see that the sustainability metric is a repurposed modernity metric relative to the ideology of the current age. To be clear: adherence to SDGs, however strictly, is no guarantee of even short-term success. Promoting the furtherance of specific SDGs by a university is an identity appeal that could align it with prospective students over the next decade, but the goals will change in 2030, as this is their stated endpoint. What replaces them will be the next stage of this process, which may well reorient the social and financial incentives of universities around the world.

3. THE THREE-BODY PROBLEM OF UNIVERSITY INTERNATIONALIZATION POLICIES

Any university will find its influences to always be somewhere in 'the figure-eight.' While policy decisions can happen at the micro and macro levels across relevant groups, committees, and forums in any university, they can be judged on their merits within each reducible or scalable element of the process.

The three factors of identity, modernity, and sustainability align with the three drivers of economic activity: moral incentives, social incentives, and financial incentives. For this reason, this paper does not forward a novel approach to university policymaking but foregrounds the fact that universities are subject to the same influences of modern economic theory as any other internationalized institution. However, when competition is no longer local, and promotion of an institution is no longer based on reputation, long-term sustainability is a far more convoluted question.

The image of the three-body problem helps set a method by which any stakeholder can see how their actions fit within the ever-developing state of the

university and therefore feel connected to the entire system. This also includes being able to see how the actions of an individual fit within an internationalized system, out of the complete control of any one decision-making body.

4. CONCLUSION

International higher education is a system of global scale, meaning that any individual stakeholder can see only one part of the moving whole and, in fact, has influence over a smaller area than is readily observable. However, this does not mean that individual efforts are immaterial to the system's movement: with a shared ethos, any group of committed individuals can influence the system.

Chasing future prosperity begins with a past identity upon which a future can be developed. Most, if not all, universities have a story they tell themselves and others about what they have done, what they are doing, and what they intend to achieve in the future. Modern metrics help explain how universities' efforts are judged relative to one another in the current era. The only remaining question is whether following today's incentives will produce a future in which this identity can continue.

NOTE

This is a concept paper exploring the methods institutions use to measure themselves and their achievements relative to one another. As such, it illustrates the process rather than providing a complete discussion of university internationalization metrics. The book "A comparative investigation of internationalized universities in Japan and the United Kingdom: English as a Lingua Franca," which contains a more thorough explanation of the project upon which this concept paper is based, is currently in press and scheduled to be published later in 2026.

REFERENCES

Fauzi, M. A., Tan, C. N. L., Daud, M., & Awalludin, M. M. N. (2020). University rankings: A review of methodological flaws. *Issues in educational research*, 30(1), 79-96.

GLOBE Project. (n.d.). *Global Leadership and Organizational Behavior Effectiveness Research Program*. Retrieved September 21, 2026, from <https://globeproject.com/>

Hou, Y-W & Jacob, W. J. (2017). What contributes more to the ranking of higher education institutions? A comparison of three world university rankings. *The International Education Journal: Comparative Perspectives* 16 (4), 29-46.

Kyushu University. (n.d.). *International Education Center (IEN Center)*. International Student Center. Retrieved January 20th, 2026, from <https://www.isc.kyushu-u.ac.jp/intlweb/en/strategy/ien-center>

Lakeland University Japan. (n.d.). *About LUJ*. Retrieved January 28th, 2026, from <https://luj.lakeland.edu/about>

Lakeland University. (n.d.). *Mission and values*. Retrieved January 28th, 2026, from <https://lakeland.edu/mission-and-values>

Meyer, E. (2014). *The culture map: Decoding how people think, lead, and get things done across cultures*. PublicAffairs.

Quacquarelli Symonds. (n.d.). *QS World University Rankings*. Top Universities. Retrieved September 21, 2026, from <https://www.topuniversities.com/world-university-rankings>

Sinek, S. (2009). *Start with why: How Great Leaders Inspire Everyone to Take Action*. Portfolio.

The Culture Factor. (n.d.). *The Culture Factor*. Retrieved September 21, 2026, from <https://www.theculturefactor.com/>

Times Higher Education. (n.d.). *Times Higher Education (THE)*. Retrieved September 21, 2026, from <https://www.timeshighereducation.com/>

United Nations. (2015). *The 17 goals*. Department of Economic and Social Affairs. Retrieved September 23, 2026, from <https://sdgs.un.org/goals>

University of St Andrews. (n.d.). *Global: University strategy archive 2018-2023*. Retrieved January 24th, 2026, from <https://www.st-andrews.ac.uk/about/governance/university-strategy/archive/2018-2023/global/>

University of Southampton. (n.d.). *Global partnerships map*. Retrieved January 24th, 2026, from <https://www.southampton.ac.uk/global-connections/global-partnerships-map.page>

APPENDIX

Table 1: ‘Culture Map’ Comparison

Japan
High context
Indirect
Principle-first/Holistic
Hierarchical
Consensual
Relationship-based
Confrontation-avoiding
Linear time
United Kingdom
Low/Mid-context
Indirect
Application-first
Egalitarian/Moderate
Consensual/Moderate
Task/Relationship-based
Confrontation-avoiding/Moderate
Linear time

Table 2: The Hofstede Six Dimensions (Culture Factor group) and the GLOBE study (GLOBE Official Portal)

Hofstede
Power distance index
Individualism/Collectivism
Masculinity/Femineity
Uncertainty avoidance
Long-term vs. Short-term normative
Indulgence vs. Restraint
GLOBE
Human orientation
Institutional vs. in-group collectivism
Gender egalitarianism
Assertiveness
Future orientation
Performance orientation

Table 3: Quacquarelli Symonds and Times Higher Education ranking methodologies

Quacquarelli Symonds	
<i>Weight</i>	<i>Descriptor</i>
50%	Research and Discovery - Academic reputation - 30% - Citations per faculty - 20%
20%	Employability and Outcomes - Employer reputation - 15% - Employment outcomes - 5%
15%	Global engagement - International faculty ratio - 5% - International research network - 5% - International student ratio - 5% - International student diversity (listed)
10%	Learning experience - Faculty/student ratio - 10%
5%	Sustainability
Times Higher Education	
Weight	Descriptor
30%	Research quality - Citation impact - 18% - Research strength - 5% - Research excellence - 5% - Research influence - 5%
29.5%	Teaching - Reputation - 15% - Staff/Student ratio - 4.5% - Doctorate/bachelor ratio - 2% - Doctorate staff ratio - 5.5% - Institutional income - 2.5%
29%	Research environment - Research reputation - 18% - Research income - 5.5% - Research productivity - 5.5%
7.5%	International outlook - International students - 2.5% - International staff - 2.5% - International co-authorship - 2.5%
4%	Industry - Industry income - 2% - Patents - 2%

Chart 4: Top 5 universities in Japan and the UK according to the QS rankings (numbered by global rank)

Quacquarelli Symonds		
Country	University	Score
Japan	39 - Tokyo	84.8
	64 - Kyoto	78.2
	95 - Osaka	69.5
	97 - Inst. of Science, Tokyo	69.2
	102 - Tohoku	68.4
UK	=2 - Imperial College London	99.2
	4 - Oxford	98.6
	6 - Cambridge	97.1
	= 8 - University College London	96.3
	35 - Edinburgh	85.9

Chart 5: Top 5 universities in Japan and the UK according to the QS rankings (numbered by global rank)

	Times Higher Education	
Country	University	Score
Japan	26 - Tokyo	83.5
	61 - Kyoto	74.0
	=103 - Tohoku	65.8
	=151 Osaka	61.8
	166 - Inst. of Science, Tokyo	60.7
UK	1 - Oxford	98.2
	=3 - Cambridge	97.2
	8 - Imperial College London	94.7
	22 – University College London	87.5
	29 - Edinburgh	82.5

This page was intentionally left blank



“English Is Just Like an Outer Shell”: A Case Study of a Multilingual Indian Family in Tokyo

Yuki OTA

Part-time Lecturer, Faculty of Commerce, Yokohama College of Commerce

FUTUREd, Volume 1, Issue 2 (2026)

Pages: 152 - 162

ISSN: 2760-8263 (print)

ISSN: 2760-8271 (online)

Keywords:

multilingualism, language practices,
Indians living in Tokyo, Malayalam,
language portrait

Corresponding author:

Yuki Ota

y.ota@shodai.ac.jp



Abstract: This case study examines the reported language practices of a 13-year-old boy and his father from Kerala, India, living in Tokyo, as well as the meanings associated with Malayalam, English and Japanese. Methodologically, the data were generated through a language portrait produced by the child and separate semi-structured interviews with the child and his father. The study analyses how these languages are used, positioned, and given meaning in everyday life.

The analysis shows that Malayalam, his first language, is represented as the most emotionally grounded language, although its use is limited to within the family and the Malayali community. It is closely associated with family, Malayali identity, and belonging. His father’s account similarly connects Malayalam with roots. English is used frequently at school and in other social settings. However, it is positioned as a more external language, described as “like an outer shell”. Japanese is positioned mainly as a language of local participation and mediation.

The findings suggest that meanings associated with languages cannot be understood simply through their frequency or range of use. This case also highlights the complementary value of interpreting a language portrait together with oral explanation and interview data.

1. INTRODUCTION

The number of foreign residents in Japan has increased steadily in recent years. According to data from the Immigration Services Agency of Japan (2025), approximately 3.77 million foreign nationals were registered as residents in Japan. This demographic change has increased the linguistic and cultural diversity of Japanese society, raising important issues for educational policies and practices.

Sociolinguistics research on migrant communities has a relatively short history. Early studies primarily focused on more established migrant populations, including Chinese and Korean “oldcomer” communities (Otomo, 2019, pp. 91-93). Research on these long-established communities has addressed heritage-language maintenance, bilingual educational opportunities, and school-based language planning (Otomo, 2019, pp. 92-92). Much subsequent research has focused on migrants for whom acquiring Japanese is

considered essential to settlement and participation in Japanese society, particularly within Japanese-medium education. Fukunaga (2014, p. 33) further notes a tendency to discuss migrants' linguistic difficulties in terms of a binary opposition between Japanese and their first or family language. Taken together, much research has often focused on the relationship between Japanese and a single family language. Less attention has been paid to more recent migrant families, including many families in Tokyo, in which the family language differs from both Japanese, the principal language of the surrounding society, and English, which is used as a language of education. Previous studies described Indian families in Tokyo in which Indian languages are used within families and English is used as a language of schooling. (Sawa & Minamino, 2009; Inoue, 2021; Wadhwa, 2021) The linguistic experiences of these families are therefore difficult to capture within the frameworks that have shaped much of the previous research.

Some Indian families living in the Greater Tokyo area provide one example of this configuration. Previous studies have described that some families who have settled in Japan on a long-term basis maintain an Indian language at home while choosing English-medium education for their children (Inoue, 2021; Sawa, 2025; Wadhwa, 2021). In these families, the parents' language, English, and Japanese may fulfil different roles across the home, school, peer relationships, and the local community. These families provide a relevant context for examining how languages are used within individual families and what meanings individuals associate with them.

This article presents a qualitative case study of a 13-year-old boy and one of his parents from a Kerala-origin family living in Tokyo. The family is examined not as representative of families from Kerala, India, as a whole, but as one case of a family whose linguistic repertoire includes Malayalam, English and Japanese. Following Spolsky (2008), language practices are understood here as regular patterns of language use and language choice. To explore meanings that may not be captured through accounts of language use alone, the study also uses a language portrait, a

visual-discursive method that invites participants to present their linguistic repertoires through colour and imagery and to reflect on and explain their choices (Krumm, 2001; Busch, 2018). Drawing on the language portrait and separate semi-structured interview with the child and his father, the study examines the family's language practices involving Malayalam, English and Japanese and the meanings the participants associate with these languages.

2. BACKGROUND

To situate the case examined in this study, this section first outlines multilingualism and the roles of English in India, before describing the broader linguistic environment of Indian families living in Tokyo.

2.1. Multilingualism and English in India

India is a highly multilingual country characterised by considerable linguistic diversity. At the Union level, Hindi and English serve official functions, while 22 languages are recognised under the Eighth Schedule of the Constitution (Department of Official Language, Ministry of Home Affairs). In addition to these scheduled languages, the 2011 Census recorded a large number of non-scheduled languages of at least 10,000 speakers (Office of the Register General & Census Commissioner, India, 2011; The Indian Express, 2018). Malayalam, one of the languages examined in this case study, is a Dravidian language spoken primarily in the southern Indian state of Kerala. This multilingualism is also reflected in the Indian education system. The medium of instruction varies across states and educational institutions, with regional languages, Hindi, and English used in different combinations. English, in particular, plays an important role as a medium of instruction in higher education and is closely associated with access to universities and professional employment both within and outside India. The number of English-medium schools has also increased in India, and the importance of English has continued to grow alongside the expansion of educational opportunities (Graddol, 2010).

Kerala provides a relevant educational migration

context for the present study. Large-scale international migration from Kerala began in the 1970s and has since had a significant impact on the state's economy and society (Zachariah et al., 2001). These linguistic, educational, and migration-related conditions provide a relevant background for the present case, in which three languages are used in different settings.

2.2. The Linguistic Environment of Indian Families in Tokyo

Since the 1990s, the number of Indian IT specialists migrating to Japan has increased. Many of these early migrants were men who came to Japan alone. As their periods of residence became longer, however, some were joined by their families, leading to an increase in households consisting of IT professionals, their spouses, and children (Sawa & Minamino, 2009).

Within Tokyo, Indian residents have become particularly concentrated in Edogawa Ward. The number of Indian residents in the ward increased from approximately 3,800 in 2018 to approximately 7,700 by April 2025 (Edogawa City, 2020, 2025a). The Nishi-Kasai area, in particular, is widely known as a centre of the Indian community and has sometimes been described as Tokyo's "Little India" (Wadhwa, 2021).

As the Indian population grew in and around the area of Nishi-Kasai, a range of community institutions and services has developed, including Indian grocery shops, restaurants, religious institutions, cultural organisations, and schools. This community infrastructure enables residents to remain many of their food practices, cultural activities, and connections with Indian social life while living in Japan (Sawa & Minamino, 2009; Inoue, 2021, pp. 6-9; Sawa, 2025).

Inoue (2021, p.10) observes that some newcomer Indian residents regard basic communicative competence in Japanese as sufficient for everyday life. Some may therefore consider it more worthwhile to devote time and effort to passing their own culture on to their children and preparing them for higher education in English-speaking countries than acquiring advanced proficiency in Japanese.

The social and linguistic environment is also closely related to families' choices concerning their children's schooling. Since the establishment of the India International School in Japan in 2004, the availability of English-medium education through Indian international schools has expanded in Tokyo and the surrounding area. By 2020, nine Indian international schools were operating in Tokyo and the surrounding area (Inoue, 2021). Inoue (2021, pp. 8-10) notes that many Indian families remain potentially mobile and may return to India or relocate to a third country. For these families, English-medium schooling can provide continuity of education and facilitate future access to higher education conducted in English. Indian international schools in the Tokyo area offer Indian and International curricula that can support educational continuity when children relocate.

The choice of an international school may also be related to considerations other than international mobility and access to higher education. Based on interviews with Indian parents in Tokyo, Wadhwa (2021) describes concerns relating to differences between Japanese and Indian educational practices, parents' limited proficiency in Japanese and their ability to participate in their children's schooling, and the possibility that children might develop a predominantly Japanese rather than Indian identity (pp. 72-76, 79-80). Indian international schools may therefore be valued not only for their practical educational advantages and the educational continuity they offer in the context of future mobility, but also as environments in which parents feel that their children's Indian identity can be supported.

This does not mean that Japanese is regarded as entirely unimportant among Indian families in Tokyo. Some families considering long-term residence or settlement in Japan may wish their children to learn Japanese and participate more in the surrounding society while also maintaining an Indian family language and receiving education through English (Wadhwa, 2021).

Taken together, the preceding discussion suggests that some Indian families in Tokyo who live in multilingual social and educational environments that show, in some respects,

continuity with multilingual language use and educational experiences in India. The studies reviewed broader educational, community, and mobility-related context for these environments. Building on this contextual work, the present case study turns into the level of an individual family. It therefore examines how Malayalam, English and Japanese are used within the family with roots in Kerala, India, living in Tokyo, and what meanings the child and his father associate with these languages.

3. METHODOLOGY

3.1. Research Design

This article draws on data from a broader qualitative study involving three Indian families living in Tokyo. The family examined here was selected for the analysis because its linguistic background provides a particularly relevant case for examining a regional Indian language, English and Japanese, and the child's language portrait and the separate interview with the child provided detailed material for examining both reported language use and the meanings associated with these languages. This study adopts a qualitative case study to examine the language practices of a family with roots in Kerala, India, living in Tokyo and the meanings that the participants associate with their languages. It draws on a child's language portrait, his oral explanation of the portrait, and separate semi-structured interviews with the child and one parent.

3.2. Participants

The participants were Jacob (a pseudonym), a 13-year-old boy, and his father. They are both from Kerala, India. Jacob had lived in Tokyo for 13 years, while his father had lived in Japan for approximately 20 years and worked as an IT engineer. The household consisted of Jacob, his parents and his younger brother. Malayalam was used within the family.

Jacob attended an English-medium Indian International school up to Grade 3 and then transferred to a local public elementary school, which he attended from Grade 4 to Grade 6. At the time of the study, he attended a private junior high

school offering a bilingual Japanese-English International Baccalaureate curriculum. English and Japanese were used as languages of instruction, depending on the subject.

3.3. Data Collection

Data were collected during a single research session held in March, 2025 in a university research room. Jacob and his father sat in separate areas of the same room. While Jacob created a language portrait, his father took part in a semi-structured interview. Jacob was interviewed before and after creating the language portrait. The session was conducted in English. All interviews and Jacob's oral explanation of the portrait were audio-recorded and transcribed verbatim.

Language portraits have been used to explore multilingual children's linguistic repertoires and the experiences, thoughts, and feelings associated with them (Krumm, 2001). They can also provide participants with an opportunity to pause and reflect on linguistic practices and preferences that may otherwise pass without awareness, and then talk about them (Busch, 2018, p. 6). Busch (2018) describes the method as representing linguistic repertoires through both pictorial-presentational and linguistic-discursive modes, allowing participants to move between visual and verbal forms of expression. Accordingly, Jacob's portrait and oral explanation were analysed together.

In the present study, the language portrait procedure was adapted by asking Jacob to construct the entire portrait from scratch rather than providing a pre-drawn body silhouette. This adaptation left the form of self-representation open and allowed him to decide how to depict himself. He was provided with a sketchbook, twelve coloured pencils, and one graphite pencil. He was asked to assign colours to his languages and to use them freely to represent how those languages formed part of him. The instructions emphasised that the drawing did not need to resemble a conventional portrait and that there was no correct or incorrect way to complete the activity. After completing the portrait, he was asked to explain his choices orally, mainly in response to questions from the researcher.

The semi-structured interviews explored the participants' language use across family, school, peer, and community contexts, as well as their experiences and views of using multiple languages. His father's interview also addressed the child's linguistic and educational history and school choices.

This study was conducted as part of a master's thesis and received approval from the university. The purpose of the research, the voluntary nature of participation, and the intended use of the data were explained in advance. Written consent was obtained from the parent, and the research was explained to the child using age-appropriate language.

Pseudonyms are used throughout the article, and identifying details have been omitted or modified to protect the family's confidentiality.

3.4. Data Analysis

Jacob's language portrait and oral explanation, his semi-structured interviews, and his father's semi-structured interview were analysed qualitatively. The analysis examined the participants' descriptions of how language use and language choice varied across domains and interlocutors. It also considered how the participants positioned and valued their languages and the meanings and values they associated with them.

The transcripts were read closely, and passages containing units of meaning were extracted and labelled with reference to the open-coding procedure described by Sato et al. (2019). The labelled passages were then compared and organised according to recurring content relating to language use and choice, self-evaluations of language proficiency, feelings and attitudes towards languages, and accounts of identity. Attention was also paid to recurrent expressions in the interviews and oral explanation, as well as to the ways in which the languages were represented visually in the portrait. Following Busch (2018), Jacob's portrait and accompanying account were interpreted together.

4. FINDINGS

This section presents the findings from Jacob's

language portrait and the semi-structured interviews with Jacob and his father. It first outlines Jacob's language practices involving Malayalam, English, and Japanese in different settings. The following subsections examine the meanings associated with these languages.



Figure 1- Jacob's Language Portrait

Figure 1 presents Jacob's language portrait. He selected brown for Malayalam, blue for English and green for Japanese. The meanings he assigned to these colours and their placement are examined in Sections 4.2–4.4.

4.1. Language Practices in Everyday Life

Jacob reported using different languages according to the settings and the linguistic repertoire of his interlocutor in his everyday life.

First, at home, Jacob reported using mainly Malayalam and occasionally English. Jacob stated that Japanese was not used at home. Jacob explained that he mixed Malayalam and English when he did not know the word that he needed in one of the languages:

(1)

Jacob: “I don't mix. Specifically, I don't mix Malayalam and Japanese a lot, but there are times when I mix English and Malayalam, for example at home, sometimes.”

Interviewer : “In what kind of situation?”

Jacob: “There are some words that I still don't know in Malayalam, so I just say those words in English”.

The relative areas occupied by three colours in Jacob's language portrait prompted a question about frequency of use. Jacob explained that he had not intended the amount of each coloured area to represent how often he spoke the language. As he reflected further, he suggested that Malayalam might be the language he used the least.

(2)

Jacob: “Not a lot. Only a few of my friends actually speak Malayalam. Most of them speak English. Well, now that I think about it, it might be true that I speak Malayalam the least because most of the people I know speak English and Japanese. Probably only a few of them actually know Malayalam.”

In Japan, Jacob used Malayalam primarily with his parents and younger brother, in the Malayali community¹, and with his grandparents through video calls. Before the COVID-19 pandemic, the family visited Kerala almost every year. During these visits, he used Malayalam with relatives and neighbourhood friends:

(3)

Interviewer: “You speak with your parents, with your little brother, and some of your friends?”

Jacob: “Yeah, especially my friends in India.”

Interviewer: “Like through video calls?”

Jacob: “Well, I only video-call my grandparents, but whenever I visit India, like with our neighbours, we talk in Malayalam.”

At school, Jacob used English or Japanese depending on the language understood by the person with whom he was speaking:

(4)

Jacob: “In my class, everyone knows English, so we speak in English, but in the other classes they only understand Japanese, so we speak in Japanese.”

Jacob had attended an Indian international school before transferring to a Japanese public elementary school in Grade 4. He subsequently entered a secondary school offering bilingual education in English and Japanese, where the language of instruction varied by subject. Outside the classroom, he also used English with youth members at church and as a common language with Indian friends from regions where Malayalam was not spoken. He used Japanese with Japanese-speaking students and in some interactions within the local community.

4.2. Malayalam as “the Colour of My Skin”

As shown in Figure 1, Jacob represented Malayalam in brown in his language portrait and placed the colour on parts of the face, hands, and legs. He explained that the reason he selected brown for Malayalam was that it represented his skin colour and because Malayalam was associated with Kerala, where he was from:

(5)

Jacob: “It's mainly because of my skin colour. And Malayalam—it's Kerala, where I'm from. So, it's my mother tongue. And I feel like I kind of represent that

¹ 1 Nationalist is a community association for people from Kerala living in Japan. Established in 1986 and registered as an *ippan shadan hojin* (general incorporated association), it operates in Tokyo, Nagoya, Osaka, Fukuoka, Touching, and Gunma. The organization holds social and cultural events, provides mutual support to the

Kerala community, participates in social causes in Japan and India, and promotes cultural exchange and relations between India and Japan. <https://www.nihonkairali.com/>(as of 25 July 25, 2026)

language and culture” .

Jacob thus linked Malayalam to his physical appearance, place of origin, and cultural background. When asked which language made him feel most like himself, he also identified Malayalam:

(6)

Jacob: “It’s Malayalam because it’s the first language that I learned when I was a kid, and I talk in it with my family, so it feels comfortable” .

Jacob also connected Malayalam with family relationships and a sense of comfort. He further expressed that many people from Kerala were moving abroad and referred to the possibility that their children might lose their connection with their homeland and culture. He therefore felt that he should preserve Malayalam and its associated culture.

(7)

Jacob:” Malayalam, it’s my culture. It’s where I’m from, so I feel like I should keep that culture, right, because in recent years, in Kerala everyone is moving outside, so like for example, when they move to America their kids are also going to be born in America and they’re not gonna have a connection with their homeland and culture so I feel like I should protect it right?”

Jacob’s father similarly regarded Malayalam as more than a means of communication, describing it as a language connected to roots and identity.

(8)

Jacob’s father: “My wife and I both wanted to have our children the roots, the identity, I think the language is not just not just this medium of communication, but it has an identity as well, so we thought like, in the core, in the center of it all, Jacob is from Kerala, Jacob is Malayali. So, we want to give him that identity inside of him. So, he consciously chose to speak in our mother tongue at home.”

Jacob’s father also distinguished proficiency in English and Japanese from Jacob’s identity as someone from Kerala:

(9)

Jacob’s father: “I am never a Japanese person. I don’t think anybody see me as Japanese or treat me as Japanese, even if I speak really good Japanese. I work with the Japanese. I will never be a Japanese person. I don’t have an identity like in Japan as a Japanese, and I’m not American either so I mean I can speak English but my thinking, my point of view is not American in most cases, so I don’t but I am Malayalam. I am from Kerala, so that is my identity. So even Jacob has good Japanese. He speaks excellent Japanese and English. But even then, he won’t be a Japanese person, so he won’t be an American. He’s an Indian, he’s from Kerala. I think that this is his identity. I don’t know if he realizes it now, but there will be a time when he realizes that, I want to equip him for developing the language.”

His father explained that the family used Malayalam at home because he wished Jacob to develop an identity as someone from Kerala. He also emphasised that speaking Malayalam enabled Jacob to communicate directly with his grandparents in India without an interpreter.

In both Jacob’s and his father’s accounts, Malayalam was therefore positioned as a language connecting Jacob to his family and cultural roots.

4.3. English as an “Outer Shell”

In his language portrait, Jacob surrounded his body with blue, the colour he had selected for English. He explained that he generally spoke English with people who were not Japanese, but that internally he was Malayali:

(10)

Jacob: “Inside, really, I am Malayali. I’m from Kerala, so inside that’s my real colour. English is just like an outer shell kind of thing” .

Jacob described what he associated with Malayalam as his “real colour”, while referring to English as “an outer shell”. However, English is not a peripheral language in his everyday life. As described in Section 4.1, he used Malayalam less frequently and across a more limited range of settings, whereas he used English frequently across a wide range of settings, including school, church, and interactions with friends from different linguistic backgrounds.

4.4. Japanese as a Language of Local Participation and Mediation

Jacob represented Japanese in green and placed the colour on the clothing of the figure in his language portrait. He explained that he represented Japanese through clothing because it was the language he used when speaking to most people in Japan. to remain in Japan for the longer term. Jacob was therefore transferred from an Indian International school to a Japanese public elementary school in Grade 4 in order to increase his exposure to the Japanese language and culture and to strengthen his connection with the local community. He subsequently entered a secondary school offering bilingual education in English and Japanese.

When asked how he felt about being able to speak several languages, Jacob described multilingual ability as “convenient”:

(11)

Jacob: “Well, it’s convenient. There are some situations where the person you’re talking to only understands one language. When we talk to Japanese people, some of them don’t know English. For example, some of my dad’s friends who live in Japan don’t know Japanese and ask me for help with legal documents because that’s in Japanese most of the time.”

Jacob’s father also describes how Jacob used both Japanese and English to mediate communication:

(12)

Interviewer: “What do you think Jacob thinks of being multilingual?”

Jacob’s father: “I think he enjoys it and is

a little proud because he’s able to speak Japanese as well as English. [...] In the football class, he used to translate the coach’s Japanese and explain the instructions in English to his friends. He took it as an opportunity and was happy about doing that.”

Both accounts concerned situations in which Jacob’s Japanese enabled him to assist others, whether by helping adults and peers. The following section considers these findings alongside Jacob’s language practices and meanings of the languages to him.

5. DISCUSSION

This study examined Jacob’s reported language practices involving Malayalam, English and Japanese across different settings and interlocutors, as well as the meanings he associated with his languages. The findings show that his use of three languages varied according to both setting and interlocutor. More importantly, the meanings associated with his languages, however, could not be understood simply in terms of the frequency or range of use. The language portrait and oral explanation made these distinctions and meanings particularly visible. Busch (2018) explains that visual representation enables multiple elements to be presented simultaneously, directing attention both to the portrait as a whole and to relationships among its elements. In Jacob’s portrait, Malayalam was represented as the colour of his skin and “real colour”, English as an “outer shell”, and Japanese as clothing, which he explained when speaking with most people in Japan.

The strongest contrast in Jacob’s portrait was between Malayalam as the colour of his skin and English as an “outer shell”. This distinction did not straightforwardly correspond to the frequency or range of his language use. He used English in a wide range of settings, including schools, church, and in communication with extensive friends from different linguistic backgrounds. It had therefore considerable educational and social significance. Nevertheless, Jacob represented it as surrounding outside of his body rather than as part of his inside body. Jacob’s extensive use of English constant

with previous studies that have described the importance of English-medium schooling among Indian families in Tokyo (Inoue, 2021; Wadhwa, 2021). The present case adds to this broader account by showing that the functional significance of English did not necessarily correspond to its position in Jacob's self-representation.

Malayalam, by contrast, was used across a limited range of setting, primarily within the family at home and the Malayali community in Japan and occasional visits to India. Yet, Jacob associated it closely by describing Malayalam as his skin, his "real colour", and the language that represented most of himself; he connected it to family relationships, comfort, his origins, and the maintenance of his culture. Busch (2018) notes that language portraits may structure linguistic experience through bodily and spatial metaphors, including contrasts between internal and external. The present case further shows that personal meanings associated with a language do not necessarily correspond to its frequency, range of use, or practical importance in everyday life.

Japanese was represented across a large area in the portrait, mainly as the figure's clothing. In his oral explanation, Jacob described it as the language he used when speaking with most people in Japan. Unlike Malayalam, which was represented as the colour of his skin, and English, which was represented as an outer shell, Japanese was represented less through his inner self or embodied self and more through his relationship with the surrounding social environment. At the same time, together with English, it enabled Jacob to take on a mediating role, for example by helping his father's friends with Japanese documents and translating his football coach's instructions for friends who needed explanations in English. Japanese therefore functioned both as language through which Jacob participated in the society around him and allowed him to facilitate communication between others.

Jacob's father's account provides a familial context for this representation. He described Malayalam as connected to Jacob's roots, identity, and cultural centre, and emphasised the family's conscious use of Malayalam at home. There was a clear

alignment that Jacob and his father associated with Malayalam, although the data do not establish that the father's beliefs directly produced Jacob's representation. Rather, his account indicates that the meaning that Jacob held for Malayalam was connected to a family environment that was explicitly connected to being Malayali and maintaining ties to Kerala.

Taken together, the findings show the value of interpreting a language portrait together with the participant's oral explanation. The visual arrangement made the relationships among the languages visible, while Jacob's oral account clarified the visual representation and connected them to his experiences. The language portrait and the interview provided complementary forms of data. The interviews provided accounts of language practices, and the language portrait and Jacob's oral explanation showed how he positioned the three languages in relation to himself and the surrounding social environment. Interpreting these materials together allowed the study to examine the meanings associated with the languages.

These findings may have implications for future discussions of language education by highlighting the importance of considering not only language use and proficiency but also the meanings associated with the languages in their repertoires.

6. CONCLUSION

This article examined the reported language practices of a 13-year-old boy and his father involving Malayalam, English and Japanese, as well as the meanings they associate with these languages. The findings showed that three languages occupied different functions and positions. English was used extensively in education and social interaction but was represented as an "outer shell". Malayalam was used in a more limited range of settings but was represented as Jacob's skin and his "real colour" and was closely associated with family, comfort, origins and culture. Japanese was associated with the surrounding environment that he participated in and Jacob's ability to mediate communication between others. These findings suggest that the frequency and range of language

use do not necessarily correspond to the significance that a language holds for an individual.

The study also illustrates the value of participants' activity of a language portrait involving reflecting on their own language repertoires and making oral explanations. The portrait made the relationships among the three languages visible, while Jacob's explanation clarified what different colours and parts of the figure represented. His father's account further provided a familial context for Jacob's representation of Malayalam. A longitudinal follow-up using repeated interviews and language portraits could examine how the family's language practices and the meanings associated with Malayalam, English, and Japanese develop and change over time.

ACKNOWLEDGEMENTS

This article is based on part of the author's master's thesis. The author would like to express sincere gratitude to the family who generously participated in this study and shared their valuable linguistic experiences. The author is also deeply grateful to Associate Professor Yaruhiro Arai of Bunkyo Gakuin University for their guidance and support in the preparation of this article. AI-assisted tools were used for language editing and translation. The author reviewed and revised all AI-assisted output and takes full responsibility for the content of the article.

REFERENCES

- Busch, B. (2018). The language portrait in multilingualism research: Theoretical and methodological considerations. In A. Fill & H. Penz (Eds.), *The Routledge handbook of ecolinguistics*, 156–170. Routledge.
- Edogawa City. (2020). *Shisaku sakutei no tame no jinkō-tō kiso bunseki* [Basic analysis of population and other data for policy formulation]. <https://www.city.edogawa.tokyo.jp/documents/18389/houkokusyo.pdf>
- Edogawa City. (2025a). Tokushū: Hitori hitori no chigai o mitomeau—Tabunka kyōsei ga hirogaru machi [Special feature: A city where multicultural coexistence is expanding by recognizing individual differences]. *Kōhō Edogawa*. <https://www.city.edogawa.tokyo.jp/e004/kuseijoho/kohokocho/kohoedogawa/2025/202505/0515/tokusyu.html>
- Edogawa City. (2025b). Tokushū: Hitori hitori no chigai o mitomeau—Tabunka kyōsei ga hirogaru machi [Special feature: A community that embraces individual differences and promotes multicultural coexistence]. *Kōhō Edogawa*. <https://www.city.edogawa.tokyo.jp/e004/kuseijoho/kohokocho/kohoedogawa/2025/202505/0515/tokusyu.html>
- Fukunaga, Y. (2014). Zainichi gaikokujin no tagengo shiyō ni taisuru Ethnolinguistic Vitality Theory no tekiō kanōsei: Zainichi Pakisutan-jin no jirei [The applicability of Ethnolinguistic Vitality Theory to the multilingual language practices of foreigners living in Japan: Cases of Pakistani individuals living in Japan]. *NINJAL Research Papers*, 8, 33–50. <https://doi.org/10.15084/00000541>
- Graddol, D. (2010). *English next India: The future of English in India*. British Council.
- Immigration Services Agency of Japan. (2025). *Reiwa 6-nenmatsu genzai ni okeru zairyū gaikokujin-sū ni tsuite* [Number of foreign residents as of the end of 2024]. Ministry of Justice, Japan. https://www.moj.go.jp/isa/publications/press/13_00052.html
- Inoue, T. (2021). Tōkyō zaijū nyūkamā Indo-jin no komyuniti keisei: “Kyōsei” no shiten kara kangaeru shinmitsuken no katsudō [Community formation among newcomer Indians living in Tokyo: Activities in the intimate sphere from the perspective of “cohabitation”]. *The Journal of Political Economy and Economic History*, 64(1), 1–18. https://doi.org/10.20633/rekishitokezai.64.1_1
- Krumm, H.-J. (2001). *Kinder und ihre Sprachen – lebendige Mehrsprachigkeit*. Eviva.
- Office of the Registrar General & Census Commissioner, India. (2011). *Census of India 2011: Provisional population totals*.
- Otomo, R. (2019). Language and migration in Japan. In *Routledge handbook of Japanese sociolinguistics*, 91–109. Routledge.
- PTI. (2018). More than 19,500 mother tongues spoken in India: Census. The Indian Express. <https://indianexpress.com/article/india/more->

than-19500-mother-tongues-spoken-in-india-census-5241056/

- Sawa, M., & Minamino, T. (2009). Gurōbaru shiti Tōkyō ni okeru Indo-jin shūjūchi no keisei: Tōkyō-to Edogawa-ku Nishi-Kasai o jirei ni [Formation of an Indian residential neighbourhood in global city Tokyo: The case of Nishi-Kasai, Edogawa Ward, Tokyo]. In H. Shoji (Ed.), *Imin to tomo ni kawaru chiiki to kokka* [Immigrants, local communities and the states: Transitions in Asia and Europe], Senri Ethnological Reports No. 83, 41–58. National Museum of Ethnology. <https://doi.org/10.15021/00001167>
- Sawa, M. (2025). Indojin: Tōkyō no IT gijutsusha to Kōbe no shōnin [Indians: IT engineers in Tokyo and merchants in Kobe]. In M. Kobayashi (Ed.), *Hen'yō suru imin komyuniti: Jikan, kūkan, kaisō* [Transforming immigrant communities: Time, space, and social stratification], 2nd ed., 176–185. Akashi Shoten.
- Spolsky, B. (2008). Introduction: What is educational linguistics? In B. Spolsky & F. Hult (Eds.), *The Handbook of educational linguistics*, 1-9. Blackwell Publishing.
- Wadhwa, M. (2021). *Indian migrants in Tokyo: A study of socio-cultural, religious, and working worlds*. Routledge.
- Sato, T., Kasuga, H., & Kanzaki, M. (Eds.). (2019). *Shitsuteki kenkyūhō mappingu: Tokuchō o tsukami, katsuyō suru tame ni* [Mapping qualitative research methods: Understanding their characteristics and applying them]. Shin-yo-sha.
- Zachariah, K. C., Mathew, E. T., & Rajan, S. I. (2001). Impact of migration on Kerala's economy and society. *International Migration*, 39(1), 63–87. <https://doi.org/10.1111/1468-2435.00135>

This page was intentionally left blank



A Pilot Case Study of Task Design and Speaking-Related Tension in Early English Education: Child Speech in the Context of Promotional Framing

Yukiko IDENO, Ph.D.

Professor, Yamazaki University of Animal Health Technology

Sachiko TAKAGI, Ph.D.

Professor, Tokiwa University

FUTUREd, Volume 1, Issue 2 (2026)

Pages: 164 - 173

ISSN: 2760-8263 (print)

ISSN: 2760-8271 (online)

Keywords:

speaking-related tension, young learners, task design, early English education, speaking task sequence

Corresponding authors:

Yukiko Ideno

y_ideno@yamazaki.ac.jp

Sachiko Takagi

takagi@tokiwa.ac.jp



Abstract: This case study and practice report examines whether observable indicators of speaking-related tension differed across two closely related tasks completed by one young EFL learner. A 7-year-old girl completed a simple number-reading task and a directed number-plus-noun task. Video data were examined qualitatively with support from Google AI Studio (Gemini 2.5 Flash Preview 04-17); AI-generated transcripts and notes served only as preliminary materials, and the researchers made all final interpretations. As a contextual component, five promotional videos from Japanese English-language schools were analyzed for recurring appeals and audiovisual features. Compared with the number-reading condition, the directed condition was accompanied by slower speech, more pauses, and greater visible hesitation. The promotional videos consistently emphasized enjoyment, reassurance, and educational effectiveness, with much of their persuasive function directed toward parents. Placing the learner's task-sensitive performance against this promotional framing highlights the importance of considering how enjoyment and confidence may depend on task design. The study therefore outlines a provisional four-step task-ramp sequence in which teachers stabilize a familiar task, add one demand, provide rehearsal, and then move to independent production. The sequence is proposed as a practice-oriented heuristic for future research and teacher education rather than as a validated intervention.

1. INTRODUCTION

1.1. Early English Education and Private Language Schools in Japan

Early English education has become a visible part

of Japanese schooling and family life. The Courses of Study published in 2008 introduced foreign language activities for fifth- and sixth-grade pupils from April 2011 (Ministry of Education, Culture, Sports, Science and Technology [MEXT], 2008).

Later policy descriptions also emphasized the gradual expansion of foreign language learning at the elementary level (National Institute for Educational Policy Research [NIER], 2016). Alongside these changes, private English schools, home-learning materials, and digital resources have increasingly presented English as an appropriate activity from early childhood. In this study, private English-language schools refer to extracurricular providers that offer English instruction outside regular compulsory schooling. For young children in Japan, such programs constitute one of several opportunities for additional exposure to English beyond formal school education. Their promotional materials are therefore relevant not simply as advertisements, but also as public representations of what early English learning is expected to look and feel like.

Parents are important actors in this development. Yamamura (2021) reported that many Japanese parents wished to take an active role in their children's English education and recognized the value of beginning at home from an early age. Yet positive expectations do not necessarily mean that children feel comfortable whenever they are asked to speak. Young learners may enjoy songs, games, and classroom interaction while still becoming hesitant when a task demands immediate recall, an unfamiliar combination of words, or public performance.

1.2. Speaking-Related Tension and Task Design

Speaking anxiety has been widely discussed in second language research, but studies often focus on adolescents or adults. Foreign language classroom anxiety has been conceptualized as a situation-specific form of anxiety arising from the unique demands of foreign language learning, including communication apprehension, fear of negative evaluation, and concern about making mistakes (Horwitz et al., 1986). Kirkpatrick et al. (2024) found that Japanese school students generally held positive attitudes toward learning English, while anxiety connected with speaking activities could still influence motivation. This distinction is important: a learner may like English as a subject or activity but experience tension in a

particular speaking situation.

Such tension may also be related to cognitive processing and task design. MacIntyre and Gardner (1994) examined language anxiety in relation to input, processing, and output stages and showed that its effects can be subtle and pervasive. From a task-design perspective, even small changes in task requirements may alter cognitive demands and learners' perceptions of difficulty (Robinson, 2001). Therefore, hesitation in a speaking task should not be interpreted simply as a lack of ability or motivation. It may reflect the interaction between task demands, cognitive processing, and the emotional conditions under which the learner is asked to speak.

1.3. Research Gap, Purpose, and Questions

The present pilot study centers on one child's speech under two closely related task conditions. To provide a contextual frame for interpreting this task-sensitive performance, it also examines how five Japanese English-language schools represent early learning in promotional videos. The child video provides evidence of observable changes during task performance, whereas the promotional videos illustrate the broader public framing of early English learning as enjoyable, reassuring, and beneficial.

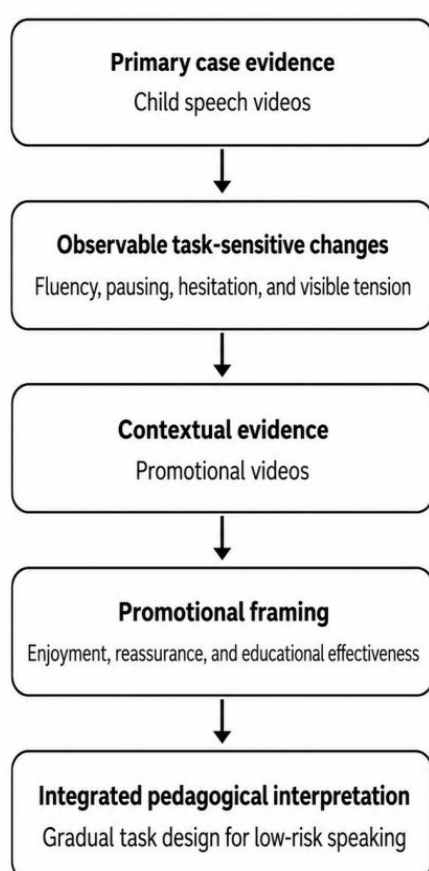
The distinctive contribution of the present study lies in bringing together two levels of evidence that are usually considered separately: a young learner's observable response to a small change in speaking-task demand and the public framing of early English learning in promotional discourse. The promotional videos are not treated as evidence about the child's psychological state. Rather, they provide a contextual account of the expectations surrounding early English education against which task-sensitive performance can be considered. This juxtaposition allows the study to shift attention from whether early English learning is represented as enjoyable to how task design may help create the conditions under which enjoyment and confidence are more likely to be sustained.

The primary purpose of this pilot study is to examine whether observable indicators of speaking-related tension differ across two closely

related speaking tasks completed by one young EFL learner. As a contextual component, the study also examines how early English learning is represented in five promotional videos, particularly the recurring emphasis on enjoyment, reassurance, and educational effectiveness. By placing the child's task-sensitive performance against this broader promotional framing, the study considers how gradual task progression may help teachers support low-risk speaking opportunities for young learners.

1. How does the learner's fluency, pausing, hesitation, and visible tension differ between a simple number-reading task and a directed number-plus-noun task?
2. How can this task-sensitive performance, considered alongside promotional representations of early English learning as enjoyable and reassuring, inform the gradual design of speaking tasks for young EFL learners?

Figure 1. Analytical framework of the study



2. METHODOLOGY

2.1. Research design

The study employed a qualitative pilot case design. It did not aim to measure a stable psychological trait or to generalize from one learner. Instead, it compared observable behavior across two speaking conditions and used the comparison to generate questions for later research. Promotional videos were analyzed as a contextual qualitative dataset in order to examine the public messages surrounding early English education.

2.2. Data sources

Two qualitative datasets were analyzed: the child speech videos and the promotional videos.

- **Child speech videos:** one 7-year-old learner completing two speaking tasks, analyzed for fluency, pauses, hesitation, task completion, and visible tension.
- **Promotional videos:** five Japanese English-language schools, analyzed for appeals, target audiences, repeated messages, and visual or audio features.

Google AI Studio was used only as an auxiliary tool for preliminary transcription and the organization of observations. The researchers made all final interpretations.

2.3. Participant and ethical considerations

The participant was a 7-year-old girl learning English in an EFL environment. No standardized English proficiency test or formal proficiency assessment was administered as part of this study; therefore, her proficiency level cannot be specified. Her exposure to English was primarily informal and took place at home rather than through regular instruction at a private language school. One of her parents is an English teacher and occasionally supported her English learning at home. Because this home-based exposure was informal and was not systematically documented, its precise duration and frequency cannot be specified. She did not attend any of the five private English-language schools whose promotional videos were analyzed in this study. The participant was not selected according to predetermined sampling criteria;

rather, she participated as an available case in this exploratory pilot study. Before data collection and recording, the purpose and procedure of the study were explained orally to the participant's parent, and verbal parental permission was obtained for her participation and for the use of the recorded data for research purposes. Her name, school, location, and other identifying details are not reported, and no image or audio sample that could identify her is reproduced in this article. The original video and audio files are stored securely, are accessible only to the researchers, and are used solely for research purposes.

2.4. Child speech tasks

The learner completed two short English speaking tasks. In the simple number-reading condition, she produced the numbers from 1 to 20 in sequence. In the directed number-plus-noun condition, she produced each number together with a specified noun. The second condition therefore retained the familiar number sequence but added a lexical requirement. The number sequence was selected because it was expected to be familiar to the learner and allowed the comparison to focus on how the addition of a small lexical demand was accompanied by changes in delivery.

The comparison was exploratory rather than experimental in the strict sense. It did not isolate a single causal variable, and the two task conditions were not counterbalanced. Instead, the analysis focused on observable differences in speech rhythm, pausing, hesitation, visible tension, and confidence-related cues across the two task conditions.

The exact duration of the session was not systematically recorded. A parent was present during the task session. No formal practice session was provided immediately before the recorded tasks, although the learner had prior informal practice with English in her everyday life. The participant was the daughter of a colleague at the researcher's workplace, and the researcher therefore had some prior familiarity with the family. Immediately before the task session, the participant had been spending time with her family at home.

The exact list of nouns used in the directed

condition was not systematically recorded. This lack of detailed task-material documentation is acknowledged as a methodological limitation of the present exploratory case study.

2.5. Promotional video corpus

The contextual dataset consisted of promotional videos associated with ECC Junior, NOVA Kindergarten, NOVA Elementary, Seiha English Language Institute, and Robinnext. The providers and videos were selected purposively according to the following criteria: the materials were publicly accessible, officially produced or distributed by the provider, concerned English education for young children or elementary-age learners, and represented services available in Japan. The aim was not to construct a statistically representative sample of the private English-school sector, but to examine a small set of visible public representations of early English learning. The analysis was informed by a multimodal perspective that considers how visual features contribute to meaning alongside spoken and written language (Kress & van Leeuwen, 2021). The analysis examined the main appeal of each video, the intended audience, repeated words or memorable phrases, persuasive techniques, and distinctive visual or audio features. It also considered which features appeared unique and which were shared across the videos.

2.6. AI-assisted qualitative procedure

Google AI Studio, using Gemini 2.5 Flash Preview 04-17, supported the first stage of the video analysis. For the child speech videos, the tool was asked to produce a transcript and describe fluency, pauses, task completion, errors or self-corrections, facial expressions, visible tension, enjoyment, and confusion. For the promotional videos, it was asked to summarize educational characteristics, identify major appeals and target audiences, note repeated language, and describe visual and audio production features.

The AI-generated transcripts and descriptions were not treated as independent findings. The researchers returned to the original videos, compared the preliminary outputs with the source material, and made the final interpretations. In

particular, affective states such as anxiety, enjoyment, or confusion were not assumed to be directly measurable from facial expression alone. The analysis therefore refers to observable indicators associated with speaking anxiety, such as reduced fluency, increased pausing, cautious production, and visible tension. These behaviors were not treated as uniquely diagnostic of anxiety, because they may also reflect increased cognitive processing demands, lexical retrieval difficulty, unfamiliarity with the task, or other situational factors.

All AI-generated observations were reviewed against the original videos by the researchers. When the AI output was considered ambiguous or inconsistent with the source material, the original recordings were prioritized, and the final interpretation was determined by researcher judgment. The observations reported in this study were treated as qualitative descriptions rather than quantitative measurements. More objective quantitative measures could be incorporated in future research. Throughout this article, references to anxiety, confidence, enjoyment, and confusion denote cautious researcher interpretations of observable, context-bound cues rather than direct measurements of the participant's internal states.

3. RESULTS

3.1. Comparison of child speech across conditions

The learner completed both tasks successfully. In both conditions, the numbers were produced in the expected order, and no major errors, repeated mistakes, or serious breakdowns were observed. The comparison therefore concerned changes in delivery rather than failure to understand the number sequence. Because the comparison was exploratory and the task conditions were not counterbalanced, the observed differences should not be interpreted as evidence of a causal effect of the added noun requirement alone. Table 1 summarizes the main observable differences between the simple number-reading condition and the directed number-plus-noun condition.

Table 1 - Observable Differences Between the Two Speaking Conditions

Indicator	Simple number-reading task	Directed number-plus-noun task
TC	Completed	Completed
ME	Not observed	Not observed
SR	Relatively steady	Slower and interrupted
P	Limited	More frequent
TR	Less evident	More evident
CE	More evident	Less evident
H	Limited	More evident
TD	None	Present (number+noun)

Note. TC = Task completion; ME = Major errors; SR = speech rhythm; P = pauses; TR = tension-related cues; CE = confidence/enjoyment-related cues; H = hesitation/possible confusion; TD = Additional task demand.

In the simple number-reading condition, the learner maintained a relatively steady rhythm. Pauses were limited, and her facial expression and tone appeared relaxed. She completed the sequence smoothly and displayed observable cues that were interpreted as greater confidence and enjoyment. The familiar and highly predictable sequence was accompanied by relatively fluent and rhythmic production.

The directed number-plus-noun condition produced a different pattern. Speech became slower, pauses occurred more frequently, and the learner appeared to check the instruction before continuing. Her facial expression and tone showed greater caution, hesitation, and occasional confusion. The task was still completed, but the additional noun requirement appeared to interrupt the rhythm that had characterized the simple condition.

These observations do not establish a clinical or stable level of anxiety. They do, however, indicate that, within this case, a small difference in task design coincided with a noticeable change in performance and observable tension-related cues. The contrast is consistent with the possibility that the added lexical requirement may have contributed to reduced automaticity and apparent confidence in this learner during this particular task.

3.2. Promotional representations of early English education

Although the videos visually foreground children through playful activities, smiling faces, songs, and classroom interaction, the persuasive function of these materials is best understood as being directed primarily toward parents, who are typically responsible for selecting and financing early English education. Appeals to enjoyment may therefore serve a dual function: they present English as attractive to children while simultaneously reassuring parents that participation will be emotionally safe and developmentally beneficial. In this sense, images of children having fun should not be interpreted simply as child-directed appeals; they also operate as evidence offered to parents that the learning environment is supportive, structured, and appropriate for young learners.

Three recurring appeal types were identified across the five promotional videos: enjoyment, reassurance, and educational effectiveness. Enjoyment was communicated through smiling children, playful movement, songs, colorful materials, and lively classroom scenes. Reassurance was constructed through references to instructors, learning environments, institutional experience, or a clear lesson structure. Educational effectiveness was expressed through messages about growth, future learning, communication ability, and the benefits of early exposure to English. Table 2 summarizes the main appeals and representative features identified in each promotional video.

The videos also shared visual and audio techniques. Bright classrooms and child-friendly materials appeared repeatedly. Children's voices and actual lesson sounds created a sense of immediacy, while cheerful background music supported an atmosphere of familiarity and optimism. The videos addressed children through play and excitement, but they also addressed parents through images of safety, organization, and educational progress.

Table 2 - Main Appeals and Representative Features of Promotional Videos

Provider	Main appeal	Representative features
ECC Junior	Enjoyment / Reassurance	Smiling children, classroom scenes
NOVA Kindergarten	Enjoyment / Reassurance	Teacher-child interaction
NOVA Elementary	Educational effectiveness	Lesson scenes, children's voices
Seiha English Language Institute	Reassurance	Bright classrooms, colorful materials
Robinnext	Educational effectiveness	Narration, structured presentation

Although the wording and production style differed across providers, the basic message was notably consistent: English learning should be enjoyable, safe, and useful for a child's development. In this promotional discourse, the possibility of hesitation or speaking-related tension remained largely invisible. The videos constructed a positive and relatively low-risk image of English learning through cheerful and reassuring cues.

4. DISCUSSION

4.1. Task demand and speaking-related tension

In this case, the change in task design was accompanied by a change in how comfortably the learner appeared to speak. The simple number-reading condition allowed the learner to rely on familiarity, sequence, and repetition. The directed condition required her to retain the instruction and integrate a noun into each utterance. Even though the additional requirement was small, it created a second point of attention and may have increased cognitive load.

This pattern is consistent with previous research on language anxiety and task complexity. MacIntyre and Gardner (1994) argued that language anxiety can interfere with cognitive processing across input, processing, and output stages of second

language performance. Robinson (2001) also emphasized that task complexity concerns the cognitive demands created by task design. In the present study, the number-plus-noun task was designed to add a lexical processing demand without substantially changing the number knowledge required. This may have reduced automaticity and made the learner more cautious during production.

This account helps explain why the directed condition was slower and more hesitant without implying that the learner lacked the relevant number knowledge. The performance difference appeared after the task changed, not because the basic material had changed substantially. The observed hesitation in this case appeared to be task-sensitive. This observation supports the possibility, to be examined in larger studies, that speaking-related tension in young learners may sometimes be situational.

This case also supports caution against automatically interpreting silence or hesitation as a lack of motivation. Kirkpatrick et al. (2024) showed that positive attitudes toward English can coexist with anxiety about speaking. The present case illustrates this possibility at a smaller level. The learner completed both activities and did not reject the task, but the additional demand altered the manner in which she spoke.

4.2. Connecting the promotional promise with classroom task demand

The main interpretive value of the combined analysis lies in the contrast between the two datasets. The promotional videos repeatedly present early English learning as enjoyable, reassuring, and educationally effective. The child case, however, suggests that the learner's apparent confidence may have shifted when one small demand was added to the familiar task. This contrast is important because foreign language anxiety research has shown that speaking in the target language can be a particularly anxiety-provoking aspect of language learning, particularly when learners are concerned about mistakes, evaluation, or being unable to express themselves (Horwitz et al., 1986). Young (1991) further

suggests that anxiety is shaped not only by learner characteristics but also by classroom procedures, error correction, and opportunities for supported practice. The point is therefore not that promotional materials are inaccurate, but that enjoyment is not an automatic property of an activity. It is partly produced by the way the activity is sequenced, modeled, rehearsed, and supported.

The images of smiling children and cheerful classrooms construct a public model of the successful young learner as active, relaxed, sociable, and visibly happy. Such images may be intended to encourage participation and reassure families, but ordinary pauses, uncertainty, and gradual development were largely absent from the five videos examined. Placing the promotional message beside the case evidence reveals a practical tension: the five promotional videos examined here presented enjoyment as an immediate feature, whereas teachers often have to create the conditions that make enjoyment possible. This distinction shifts the discussion from whether a lesson looks enjoyable to how instructional design may support confidence when task demands increase. Although the present study did not examine later stages of education, the findings suggest a need for future research on whether low-risk participation and gradual task progression can be maintained as speaking demands increase. This possibility should be treated as a hypothesis for future investigation rather than as a finding of the present case study.

5. EDUCATIONAL IMPLICATIONS

5.1. A provisional four-step task-ramp sequence

The proposed four-step task-ramp sequence was derived from three observations considered together. First, the learner showed relatively fluent and relaxed performance in the familiar number-reading task. Second, the addition of a single lexical demand in the number-plus-noun condition coincided with slower production, more pausing, and greater visible hesitation. Third, the promotional videos consistently framed early English learning in terms of enjoyment,

reassurance, and positive engagement. Taken together, these observations suggest that enjoyment and confidence should not be assumed to arise automatically from an activity; rather, they may depend partly on how new task demands are introduced and supported.

On this basis, and informed by previous research on task complexity (Robinson, 2001) and low-anxiety classroom procedures (Young, 1991), we provisionally outline a four-step task-ramp sequence for early speaking activities. The sequence is not presented as an empirically validated intervention, but as a practice-oriented heuristic that should be examined in future studies with a larger number of learners.

Each step is designed to increase task complexity gradually rather than adding several demands at once. First, stabilize a familiar base task so that the learner can establish rhythm and automaticity. Second, add only one new demand and make it visible through modeling or a worked example. Third, provide preparation time and a low-risk rehearsal, such as quiet practice, pair work, or choral production. Fourth, move to independent production and delay detailed correction until the learner has completed the message. This sequence may make it easier to identify which added demand is associated with a change in the learner's performance.

The sequence also clarifies the role of enjoyable activities such as songs, rhythm, pair work, and short repeated exchanges. Their value is not limited to entertainment. They may function as structured bridges from supported to less-supported production by offering predictable language, shared timing, and repeated opportunities to succeed before a new demand is introduced.

Feedback and public communication may also benefit from the same principle. Teachers can value fluency and willingness to try alongside accuracy, while schools can present pauses, mistakes, and gradual improvement as normal parts of learning. A more balanced public message can still emphasize enjoyment while acknowledging that confidence may be supported through preparation, manageable challenge, and supportive feedback.

6. LIMITATIONS AND FUTURE RESEARCH

Several limitations should be recognized. The child analysis involved only one participant and two short tasks. The findings are therefore preliminary and cannot be generalized to young learners as a group. Speaking anxiety was not measured through a validated scale or interview; it was inferred cautiously from observable indicators. Facial expression and tone are open to interpretation, and the presence of recording may itself have influenced behavior.

The promotional dataset was limited to five videos from selected providers. Other schools, local programs, online services, and home-learning products may use different messages. The videos were also analyzed as public promotional texts rather than through interviews with their producers or viewers, so the intended and received meanings may not be identical.

Future research should include more children, repeated observations, and systematically controlled tasks. Quantitative measures such as speech duration, mean pause length, pause frequency, and rate of self-correction could complement qualitative observation. Human coding by multiple raters would also improve reliability and allow comparison with AI-assisted notes. For promotional discourse, a larger corpus and parent interviews could clarify how messages about enjoyment and reassurance shape expectations.

The two task conditions were not counterbalanced, and the learner's familiarity with the specified noun was not independently assessed. The observed differences therefore cannot be attributed solely to task demand; task order, novelty, lexical familiarity, fatigue, or other contextual factors may also have contributed.

7. CONCLUSION

This pilot case study examined a small change in a young learner's English speaking task and compared that experience with promotional representations of early English education. The learner completed both tasks, yet the directed

number-plus-noun condition was accompanied by slower speech, more pauses, and greater visible hesitation. The promotional videos, meanwhile, consistently presented early learning as enjoyable, reassuring, and educationally beneficial.

Taken together, the present case and the five-video corpus highlight a possible tension between promotional representations of enjoyable early English learning and the task-sensitive nature of one child's speaking performance. The findings do not establish a general pattern among young learners. They suggest, however, that gradual task progression warrants further examination as a possible means of supporting learners' willingness to speak. Although exploratory, the study offers a starting point for larger investigations of observable speaking-related tension and for more nuanced discussions of enjoyment in early EFL education.

For teacher education and professional development in early English education, the present case suggests the value of training teachers to recognize hesitation not simply as lack of motivation or ability, but as a possible response to changes in task demand. The proposed task-ramp sequence may provide a practical framework for designing low-risk speaking opportunities, although its effectiveness requires examination with larger and more diverse groups of learners.

APPENDIX: ANALYTIC PROMPTS

Child speech video prompt

The tool was asked to transcribe the video and describe speech fluency, visible tension based on facial expressions, task completion, errors or self-corrections, speech duration, pauses or silence, and possible signs of motivation, enjoyment, or confusion based on facial expression and tone of voice.

Promotional video prompt

The tool was asked to summarize the characteristics of early English education, identify the main appeals and their relationship to the video

content, describe the primary target audience and persuasive techniques, list repeated keywords or memorable phrases, note distinctive visual and audio features, and compare the video with other early English education advertisements where possible.

ACKNOWLEDGEMENTS

This article expands a poster presentation delivered at the 8th Foreign Language Education and Technology (FLEAT 8) Conference, held June 25–28, 2025, at the University of Hawai'i at Mānoa, Honolulu, Hawai'i, USA. The authors thank the conference participants for their comments and feedback. Before data collection and recording, the purpose and procedure of the study were explained orally to the participant's parent, and verbal parental permission was obtained. The participant was de-identified in the reporting of the study, and the original video and audio data are securely stored, accessible only to the researchers, and used solely for research purposes. Google AI Studio, using Gemini 2.5 Flash Preview 04-17, was used as an auxiliary tool for preliminary transcription and the organization of video observations. Generative AI tools were also used for language refinement and formatting support during manuscript preparation. The authors reviewed all outputs, made all scholarly interpretations, and accept full responsibility for the accuracy and integrity of the article.

REFERENCES

- Horwitz, E. K., Horwitz, M. B., & Cope, J. (1986). Foreign language classroom anxiety. *The Modern Language Journal*, 70(2), 125–132. <https://www.jstor.org/stable/327317>
- Kirkpatrick, R., Kirkpatrick, J., & Derakhshan, A. (2024). An investigation into the motivation and attitudes of Japanese students toward learning English: A case of elementary and high school students. *Asian-Pacific Journal of Second and Foreign Language Education*, 9, Article 23. <https://doi.org/10.1186/s40862-023-00243-z>
- Kress, G., & van Leeuwen, T. (2021). *Reading images: The grammar of visual design* (3rd ed.). Routledge.

- MacIntyre, P. D., & Gardner, R. C. (1994). The subtle effects of language anxiety on cognitive processing in the second language. *Language Learning*, 44(2), 283–305.
- Ministry of Education, Culture, Sports, Science and Technology. (2008). *Chapter 4 foreign language activities*.
https://www.mext.go.jp/a_menu/shotou/new-cs/youryou/eiyaku/gai.pdf
- National Institute for Educational Policy Research. (2016). *Foreign language (English) education in elementary school*.
<https://www.nier.go.jp/English/educationjapan/pdf/2016FLEES.pdf>
- Robinson, P. (2001). Task complexity, task difficulty, and task production: Exploring interactions in a componential framework. *Applied Linguistics*, 22(1), 27–57.
- Yamamura, M. (2021). An interrelationship among parents, home education and English language: From the perspective of parentocracy. *Bulletin of the Graduate School of International Cultural Studies, Aichi Prefectural University*, 22, 39–60.
- Young, D. J. (1991). Creating a low-anxiety classroom environment: What does language anxiety research suggest? *The Modern Language Journal*, 75(4), 426–439.
<https://www.jstor.org/stable/329492>



Rethinking Dictogloss: A Practitioner's Reflection on Students' Perceptions of Cognitive Engagement

Hiroko NAKAGAWA

Mejiro University, Faculty of Foreign Language Studies,
Department of English Language Studies

FUTUREd, Volume 1, Issue 2 (2026)

Pages: 174 - 181

ISSN: 2760-8263 (print)

ISSN: 2760-8271 (online)

Keywords:

dictogloss, cognition, learner
perception, cooperative learning,
future language education

Corresponding author:

Hiroko Nakagawa

h.nakagawa@mejiro.ac.jp

Abstract: English education in EFL classrooms is increasingly expected to become more communicative and student-centered. This paper explores dictogloss as a potential pedagogy for future language education in secondary schools. Dictogloss is a collaborative listening-and-reconstruction task in which learners work in small groups to reconstruct the meaning of a text using their own linguistic resources (Wajnryb, 1990). The study examines Japanese 12th graders' responses to an open-ended questionnaire asking whether they believed that regular use of dictogloss from the beginning of high school might have influenced their English proficiency. The analysis focuses particularly on the cognitive benefits perceived by the students. Their responses suggested potential benefits related to summarizing key information, taking notes, identifying main ideas, noticing errors, constructing sentences, making inferences from limited information, and coping with unfamiliar texts. The discussion draws on Yoshida's (2005) metaphors of the "fish bowl" and the "open seas," together with Maeda's view of dictogloss as an intermediate pedagogical environment between controlled classroom practice and authentic communication. Although the findings represent students' perceptions rather than measured long-term effects, they suggest that dictogloss may provide cognitively and collaboratively engaging learning experiences. The paper concludes that, although dictogloss is not a new technique, it deserves renewed attention as a potential approach to revitalizing EFL classrooms and preparing learners for more authentic communication.



1. INTRODUCTION

In Japan, English is one of the mandatory school subjects studied by all students from 5th through 12th grade. In the English-as-a-foreign-language (EFL) environment, the overall objective of foreign language education is to develop students' communicative competencies through language

activities including five English domains (MEXT, 2018). However, many teachers in Japan still conduct teacher-centered lessons in a grammar translation teaching style, using whole-class choral activities to translate words and phrases (Lawrence, 2025). Based on the author's teaching experience, the most important competencies that future language education should focus on are the

development of learners' cognitive skills, along with the development of the integrated four basic English skills, vocabulary, and communicative skills, i.e., to notice problems, think critically, and find solutions.

Dictogloss is not new, yet it does not seem to have reached classrooms and is still at an experimental stage in Japanese high school contexts. The author believes that dictogloss may help future generations to acquire cognitive skills, such as understanding main ideas and summarizing a longer text, making inferences, taking notes by listening and recognizing keywords, noticing their own grammatical mistakes through activities with their peers, and finding solutions with their limited information and knowledge to construct English sentences by cooperating with the other group members. In this paper, I would like to investigate how Japanese high school students perceived the cognitive benefits of long-term exposure to dictogloss.

2. LITERATURE REVIEW

2.1. Dictogloss

Dictogloss was originally introduced by Wajnryb (1990) as a method to teach grammar. Wajnryb (1990) defines dictogloss as follows:

In dictogloss a short text is read at normal speed to a class of learners who jot down familiar words as they listen. At the end of the dictation stage, most learners hear only a small number of isolated words (or fragments) which together make up a very incohesive, 'battered text.' In small groups, the students then pool their resources to reconstruct their version of the original text. In the final stage the various versions that the students have produced are subjected to close analysis and comparison (Wajnryb, 1990, pp. 5–6).

While overseas researchers have proven the effectiveness of dictogloss, in Japan, Maeda (2008, 2015, 2021) portrays dictogloss not only as a skill-integrating classroom task but also as a cognitively engaging and instructionally flexible framework. Many overseas researchers have proven the effectiveness of dictogloss in developing vocabulary (MacKenzie, 2013), writing (Sugiarti,

2012; Aryuni et al., 2021), listening (Prince, 2013; Asrobi and Amni, 2017), but not much has been done regarding cognitive development by dictogloss activities.

2.2. Dictogloss and Cognition

Dictogloss is assumed to be a cognitively challenging activity for Japanese high school students who are normally passive and receptive in teacher-centered language classes.

Swain (1985) proposed the Output Hypothesis, arguing that language production plays an active role in second language learning. In a dictogloss activity, students attempt to express their intended meanings through writing. Swain (2001) further developed the Output Hypothesis by emphasizing the role of collaborative tasks in language learning. Students participate in cooperative learning where they are encouraged to speak up, discuss, think, and collaborate to find solutions together to reach a common goal. They may learn from gaps between what they want to express and what they can express.

Schmidt (1990) argues that learners must consciously notice linguistic features, such as grammatical structures, vocabulary, or pronunciation, for them to be fully processed. Long (1991) introduced the Focus on Form approach in second language acquisition as part of task-based and communicative language teaching. Both Schmidt and Long place a high value on learning in which grammar is not always directly taught but is noticed by the learner through a task or an activity.

From the perspective of Processability Theory, learners cannot necessarily process or produce every grammatical structure simply because it is presented in the input. Pienemann (1998) argues that learners can acquire only those linguistic forms that they are able to process at a given stage of development. In dictogloss, this suggests that learners reconstruct texts using linguistic forms that they can process at their current stage of development.

Metacognitive processes that may take place during the negotiation and reconstruction stages of

dictogloss include inferencing, summarizing, monitoring, and problem solving.

These theoretical perspectives are used in this paper as lenses for interpreting students' perceptions rather than as frameworks to be empirically tested.

2.3. Collaborative Cognition

It is important to mention that dictogloss is also a cognitive process that occurs through collaborative interaction. Johnson et al. (2009) emphasize important principles of cooperative learning, including positive interdependence, individual accountability, and face-to-face promotive interaction, in which group members support one another's learning by explaining, discussing, teaching, and sharing ideas. Kagan (2013) also proposes structured cooperative learning activities designed to increase active student participation.

In dictogloss, these principles can be applied during the reconstruction stage when students share information, discuss possible answers, and work together toward the common goal of reconstructing the text.

3. METHOD

3.1. Participants

The research took place in 2025 with students at a Tokyo metropolitan public high school in an urban area of Tokyo. In this research, seventy-two 12th graders aged 17-18 took part (N=72). 49 males and 23 females were surveyed. Since they happened to be on the science track, there were twice as many male students as female students, but this paper is not concerned with gender differences but with the students' general perceptions of their cognitive developments through dictogloss.

3.2. Dictogloss Procedure

The dictogloss experiment was conducted for 50 minutes in a regular classroom according to the procedure and teacher's tasks as follows:

1. Group students into groups of four and have them seated accordingly.
2. Hand out the prepared visual aids (one sheet per group).

3. Hand out *Worksheet 1* to each student for individual notes. See APPENDICES.

4. Have students chat about the topic within their groups while looking at the picture.

5. Teach new words by going through the vocabulary list on *Worksheet 1*.

6. Prepare students for the dictogloss activity.

7. Read the passage in English for the first time while students just listen.

8. Read the passage in English for the second time while students take notes of key words on *Worksheet 1*.

9. Have students individually try to construct sentences using their notes.

10. Hand out *Worksheet 2* for groupwork for reconstruction (one sheet per group). See APPENDICES.

11. Give students 15 minutes to work together in groups to reconstruct the original sentences on *Worksheet 2*. They may create their own sentences based on their knowledge of grammar and vocabulary.

12. Read the same passage one more time while students listen for any parts they could not catch or figure out.

13. Give students additional time to discuss and finalize their reconstructed sentences.

14. Have one member from each group write one sentence on the blackboard.

15. Check the sentences on the blackboard, go through each one, and provide feedback on their reconstructions.

16. Collect *Worksheet 1* and *Worksheet 2*.

17. Following the activity, students completed the questionnaire.

3.3. Open-ended Questionnaire

There were 7 open-ended questions as well as 17 six-Likert scale ones. In this paper, nevertheless, only Open-ended Question 20 is specifically explored and discussed. Question 20 is in a subjunctive form:

If you had continued with this activity regularly from the first year of senior high school (=the 10th grade), do you think it would have made a difference on your English proficiency now? Write anything, such as ‘No, it wouldn’t have,’ ‘In what sense you think it would have made a difference,’ etc.

The number of those students who answered that this activity would have made a difference was counted. As high as 76.4% of the participants gave positive feedback, while 23.6% were skeptical about the effect.

To explore participants’ perceptions of the effects of the dictogloss activity in greater depth, the open-ended responses to Open-ended Question 20 were coded and grouped into seven major categories, the percentages of which are presented in Figure 1.

As this question asked students to imagine a hypothetical situation, their responses represent retrospective perceptions rather than observed long-term effects.

3.4. Coding Procedure

To explore participants’ perceptions of the effects of the dictogloss activity in greater depth, the open-ended responses to Question 20 were coded and grouped into seven major categories. The responses were first read carefully, and recurring themes were identified inductively from the students’ responses rather than defined in advance. Each response was assigned to only one of the seven major categories. Each of these 13 responses was assigned to only one of the four cognitive categories. Responses related to cognition were then further classified into four categories: summarizing skills, taking notes and identifying main ideas, noticing errors and finding solutions, and coping with unfamiliar texts or making inferences.

The coding was conducted by the author. No second independent coder was used, and therefore inter-rater reliability was not calculated. This is acknowledged as a limitation of the present study.

The numerical results reported in this paper are descriptive frequencies and percentages based on

the coded responses. No inferential statistical analyses were conducted.

3.5. Ethical Considerations

The research was conducted in accordance with the ethical regulations of Bunkyo Gakuin University. Because the participants included minors, the required consent procedures, including consent from their parents or guardians, were completed before data collection. Participation was voluntary, and the purpose of the research and the handling of personal information were explained in advance. All data were handled so that individual participants could not be identified, and participation or non-participation did not affect students’ academic evaluation.

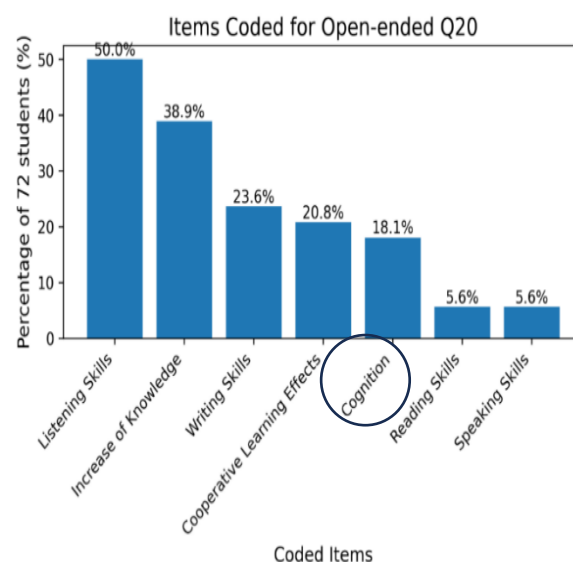


Figure 1 - Items Coded for Open-ended Question 20 (N=72)

4. RESULTS

4.1. Perceived Effects on Cognition

Thirteen respondents (18.1%) described cognitive benefits (See Figure 1 and Table 1). These included summarizing skills (5.6%), taking notes and identifying main ideas (5.6%), noticing errors and finding solutions (4.2%), and coping with unfamiliar texts or making inferences (2.8%). (Table 1) These comments suggest that students perceived potential benefits related to higher-level cognitive processes such as analysis, inference, and metacognitive awareness. Students’ recognition of noticing and problem-solving further suggests the perceived potential of the task

to support deeper cognitive processing.

Table 1 - Cognitive items mentioned by students, coded 12) – 15)

Coded Items	Number	%
15) Summarizing skills	4	5.6
14) Taking notes / Identifying main ideas	4	5.6
12) Noticing errors / Finding solutions	3	4.2
13) Coping with unfamiliar texts / Making inferences	2	2.8
Total number of students:	13	18.1

The following student comments were originally written in Japanese and were translated into English by the author.

4.2. Summarizing skills

One student writes that he could have acquired the ability to recognize the important parts and summarize the text. Another student writes that he could have listened while being aware of the main ideas and the flow of the whole story. For example, one student wrote, “I think I would have developed my listening and summarizing skills. The ability to explain the whole content in general terms.”

This is why Wajnryb (1990) states the name dictogloss comes from traditional dictation, but the procedure and objectives are different. There is much cognitive work required in listening for key words and reconstructing sentences.

4.3. Notetaking

Four students mentioned the potential of dictogloss in developing their note-taking skill itself. They can develop their concentration to listen for key words and write them down quickly through repeated practice. For example, one student wrote, “I think my listening skills would have been better than now. I think I would have developed the ability to take notes on important points.”

Even in this seemingly simple note-taking task, cognitive engagement in sorting out keywords from a lot of detailed information is required.

4.4. Noticing Errors / Finding Solutions

One student wrote, “Since everyone has different

English abilities, ways of thinking, and ways of expressing things, I could learn various ways of expressions and also notice my own mistakes.” One other student says he could notice his weaknesses to be enhanced in English learning.

4.5. Coping with Unfamiliar Texts and inference

One student comments, “In our English Communication classes at school, we only read and comprehended textbook passages, but I thought that regularly working with unfamiliar texts read by the teacher would help me become better prepared for entrance examinations.” In other words, the student would be able to infer while listening or reading even with limited information or poor prior knowledge.

5. DISCUSSION

5.1. Dictogloss as a Potential Cognitive Apprenticeship

Based on the analysis of the survey’s Open-ended Question 20 as well as the review of previous research, dictogloss may be regarded as a potential cognitive apprenticeship for Japanese high school EFL learners. Through the carefully prepared materials and worksheets and well-considered procedure suitable for the level of the target learners, dictogloss can provide learners with such opportunities for highly cognitive “man-made” language experiences provided by the teacher.

Reconstruction work in dictogloss is negotiation among the group members. Naturally, it means a lot of cognitive efforts in filling in the parts of the sentence they did not understand by listening. With their limited knowledge and information, students are supposed to create their own sentences, each sentence with a subject and a verb.

5.2. Goldfish Bowl and Open Seas

In an EFL environment such as Japan, there are no opportunities for students, except for some contact with ALTs at school, to work with native speakers or international students to practice English. It is difficult to create truly authentic communicative situations for them. While teachers are supposed to guide students into the “open seas” of authentic

communication, students are often confined to a “fishbowl” of limited classroom exercises (Yoshida, 2005).

5.3. Dictogloss as a Swimming Pool

In this sense dictogloss can serve as an intermediate “swimming pool,” enabling learners to engage in structured yet meaningful pseudo-communication situated between controlled practice and authentic interaction (Maeda, 2021). With appropriate scaffolding, students can participate with reduced anxiety and actively engage in collaborative efforts through cooperative learning.

5.4. Implications for Future Language Education

What is the ideal future language education? In the era of AI, it will be more important that human thinking not be replaced by AI. For us foreign language teachers to fully prepare young students to survive in the future, the skills and qualities required are surely communicative skills, critical thinking skills, and social skills to cooperate with others and function in society. Although dictogloss itself is not new, it may hold the key to the renewal and activation of EFL classrooms for the globalized world.

6. CONCLUSION

6.1. Students’ Perceptions of the Cognitive Value of Dictogloss

For the survey, many responses to Question 20 mentioned the perceived effectiveness of dictogloss to help develop their listening and writing, vocabulary, and grammar. However, one particularly noteworthy finding was that quite a few respondents mentioned dictogloss potential to help develop their skills and qualities that they are going to need to meet their future challenges. Their responses suggested that they perceived the possibility of developing metacognitive skills. They perceived that they could develop the skills to think individually and notice, negotiate and think collaboratively, extract information, make inferences, cope with unfamiliar information, summarize, solve problems to reconstruct, create, and express.

6.2. Limitations

As Question 20 is just a small part of the questionnaire conducted this time, and as the number of coded responses was limited, for example, 2 students (2.8%) for inferencing and 4 students (5.6%) for summarizing skills, none of these findings can be statistically generalized. However, the voices of students who verbally expressed the perceived effectiveness of dictogloss from a metacognitive perspective cannot be overlooked. Therefore, these responses deserved a closer look and analysis.

Another limitation is that the coding was conducted by the author alone. Since no second coder was involved, inter-rater reliability could not be calculated. In addition, Question 20 asked students to imagine the possible effects of regular use of dictogloss from the first year of high school. Therefore, the responses represent students’ perceptions of possible long-term effects rather than measured longitudinal outcomes.

For further research, a larger-scale survey focusing specifically on the metacognitive aspects of dictogloss should be conducted, preferably with multiple coders and additional measures of cognitive or metacognitive development, as well as longitudinal or experimental research designs.

6.3. Teaching Implications

Despite these pedagogical, practical, and theoretical advantages, dictogloss is not yet widely known or systematically used in Japanese classrooms. Therefore, the author would strongly like to recommend that dictogloss be introduced to a wider community of middle-school English teachers in Japan as a future method because it may provide learners with opportunities to develop not only language skills, but also cognitive and collaborative competencies required for authentic communication.

6.4. Final Remarks

Although dictogloss itself is not a new teaching technique, this study suggests that it deserves renewed attention from the perspective of future language education. By integrating listening, reconstruction, collaboration, and cognitive

engagement, dictogloss may serve as a bridge between traditional EFL instruction and more authentic communication-oriented learning.

Groupwork Photo of Reconstruction Groupwork



AUTHOR'S NOTE

The dictogloss activity and questionnaire were originally conducted in 2025 as part of the author's master's thesis research at Bunkyo Gakuin University. The present paper re-examines a specific aspect of those data, i.e., the students' perceptions of the potential cognitive and metacognitive value of dictogloss, which was not examined in the original thesis.

The original data collection was conducted in accordance with the university's ethical requirements. Required informed consent procedures were completed before data collection, including the appropriate consent procedures for participants who were minors. Participation was voluntary, personal information was protected, and the data presented in this paper do not identify individual participants.

Microsoft Excel was used only to calculate descriptive frequencies and percentages. No inferential statistical analyses were conducted.

AI-based tools were used only for limited language editing and proofreading. All analyses, interpretations, conclusions, and any remaining errors are solely the responsibility of the author.

REFERENCES

Ariyuni, D. E., Waris, A., & Jamiluddin, J. (2021). The use of dictogloss technique to improve students' writing skill. *E-Journal of ELTS*

(*English Language Teaching Society*), 9(1), 32–41.

<https://doi.org/10.22487/elts.v9i1.1836>

Asrobi, M., & Amni, K. (2017). The use of dictogloss in teaching listening comprehension for EFL learners. *Voices of English Language Education Society*, 1(1), 61–70.

<https://doi.org/10.29408/veles.v1i1.394>

Johnson, D. W., Johnson, R. T., & Holubec, E. J. (2009). *Circles of learning: Cooperation in the classroom* (6th ed.). Interaction Book Company.

Kagan, S. (2013). *Kagan cooperative learning structures*. Kagan Publishing.

Lawrence, L. (2025). Yakudoku today: Investigating the use of yakudoku in Japanese secondary schools using the COLT observation scheme. *Sougou Bunka Kenkyuu*, 30(2–3), 1–19. https://www.bus.nihon-u.ac.jp/wp-content/uploads/2025/04/30_LukeLawrence.pdf

Long, M. H. (1991). Focus on form: A design feature in language teaching methodology. In K. de Bot, R. Ginsberg, & C. Kramsch (Eds.), *Foreign language research in cross-cultural perspective* (pp. 39–52). John Benjamins. <https://doi.org/10.1075/sibil.2.07lon>

MacKenzie, A. (2013). Dictogloss tasks to promote cooperative learning and vocabulary acquisition. *Journal of Business Administration*, 81, 135–143. <https://toyo.repo.nii.ac.jp/records/4585>

Maeda, M. (2008). Dikutogurosu wo mochiita risuningu noryoku wo nobasu shido: Ginokan no togo wo shiya ni irete [Improving listening ability through dictogloss: Focusing on the integration of language skills]. *STEP Bulletin*, 20, 149–165. https://www.eiken.or.jp/center_for_research/pdf/bulletin/vol20/vol_20_p149-p165.pdf

Maeda, M. (2015). Natural approach or artificial approach? *Forum of Language Instructors*, 9, 13–32. <https://kanazawa-u.repo.nii.ac.jp/record/30167>

Maeda, M. (2018). *Dikutogurosu wo toriireta eigoryoku wo nobasu gakushuho shidoho* [Learning and teaching method by dictogloss to improve EFL learners' English ability].

Kaitakusha.

Maeda, M. (2021). Instruction through dictogloss. *Kanazawa Seiryō University Bulletin of the Humanities*, 5(1), 1–8. https://www.seiryō-u.ac.jp/u/research/gakkai/ronbunlib/humanities_ronsyo_pdf/No5_1/01_maeda.pdf

Ministry of Education, Culture, Sports, Science and Technology. (2018). *Koto gakko gakushu shido yoryo dai 2-sho dai 8-setsu gaikokugo* [The Course of Study for senior high schools, Chapter 2, Section 8: Foreign languages]. https://www.mext.go.jp/a_menu/shotou/new-cs/1417513.htm

Pienemann, M. (1998). *Language processing and second language development: Processability theory*. John Benjamins Publishing Company. <https://doi.org/10.1075/sibil.15>

Prince, P. (2013). Listening, remembering, writing: Exploring the dictogloss task. *Language Teaching Research*, 17(4), 486–500. <https://doi.org/10.1177/1362168813494123>

Schmidt, R. (1990). The role of consciousness in second language learning. *Applied Linguistics*, 11(2), 129–158. <https://doi.org/10.1093/applin/11.2.129>

Sugiarti. (2012). *Improving the learners' writing skill through dictogloss: A classroom action research at grade IX I of SMP Negeri 3 Ungaran in the academic year 2011–2012* [Master's thesis, Universitas Muhammadiyah Surakarta]. Universitas Muhammadiyah Surakarta Institutional Repository. <https://eprints.ums.ac.id/20823/>

Swain, M. (1985). Communicative competence: Some roles of comprehensible input and comprehensible output in its development. In S. Gass & C. Madden (Eds.), *Input in second language acquisition* (pp. 235–253). Newbury House.

Swain, M. (2001). Integrating language and content teaching through collaborative tasks. *Canadian Modern Language Review*, 58(1), 44–63. <https://doi.org/10.3138/cmlr.58.1.44>

Wajnryb, R. (1990). *Grammar dictation*. Oxford University Press.

Yoshida, K. (2005). The fish bowl, open seas, and international English. In *KOTESOL Proceedings 2004: Expanding horizons: Techniques and technology in ELT* (pp. 11–

20). Korea TESOL.

https://mail.koreatesol.org/sites/default/files/pdf_publications/KOTESOL-Proceeds2004web.pdf

APPENDICES

Worksheet 1 – Sample of Notetaking

Step 1 Why are some people bitten by mosquitoes more often than others?

Step 2 Listen to the key words, pronounce and memorize them!

addition	付加, 追加	
attract	～を引きつける	
bacteria	バクテリア, 細菌	
biological	(物) 生物学的な	
bite	～を噛む	
blood type	血液型	
breathe	息を吸う	take a breath – 息をいだけ
CO ₂	二酸化炭素 (Carbon Dioxide)	
certain	(部) 特定の	
chemicals	化学物質	
factors	要素	
generally	一般的に	
land	陸地	
less	(物) より少ない	little-less-least
mosquitoes	蚊たち	
nearly	ほとんど	
regardless of	～とは関係なく	
release	～を放す, ～を放つ	
dengue	デング熱	
Zika	ジカ熱	

Step 3 1 回メモを取らずに書く, 2 回目に関き取ったワードなどを, できるだけたくさんメモしなさい。

1	blood type can also be factor.
2	be sandy ground certain blood type
3	in said land people type ② mu croc time (A)
4	B > A B < O
5	in nation 25% dengue while 30% do not
6	has are more do less regardless of blood type attractive

Step 4 Use your memos and try to reconstruct the sentences on your own. (自分ひとりで)

Worksheet 2 – Sample of Reconstruction

<Worksheet 2>

Why do mosquitoes like you?

Step 5 Reconstruct sentences with your group members!

Work together to reconstruct (再構築する) the sentences. Think about the content (内容) and grammar (文法).

※ 語彙は全員で読んでおいて, 必要な内容だけかき出していかなければ, S, V を使って自分たちで文を作らないといけない。

Decide the roles in your group! Write the nicknames.

1. Leader () 2. Secretary () 3. Facilitator () 4. Timekeeper ()

3 & 4 can be done by one member.

1.	Some people attract mosquitoes.
	It is said that there are several factors.
2.	One factor is color.
	Mosquitoes don't like black color.
3.	Another factor is temperature.
	Mosquitoes like high body temperature.
4.	Next, like carbon dioxide.
	Because, it is attracted mosquitoes.
5.	In addition, mosquitoes like bacteria.
6.	Finally, people have 4 blood types.
	Blood type O people is most often bitten by mosquitoes another blood types people.
7.	After all, mosquitoes really dease.



What Textbooks Tell Us about Language Learning: A Comparative Reflection on Japanese and English Teaching Materials

Fukumi HIGASHIHIRA, Ph.D.

Associate Professor, Tottori University, Headquarters for Education Design

Yukiko IDENO, Ph.D.

Professor, Yamazaki University of Animal Health Technology, Faculty of Animal Health Technology

FUTUREd, Volume 1, Issue 2 (2026)

Pages: 182 - 187

ISSN: 2760-8263 (print)

ISSN: 2760-8271 (online)

Keywords:

language teaching materials, textbook comparison, Japanese language education, English language education, intercultural communication

Corresponding author(s):

Fukumi Higashihira
fukumi@tottori-u.ac.jp

Yukiko Ideno
y_ideno@yamazaki.ac.jp

Abstract: This paper examines similarities and differences between Japanese and English language teaching materials, focusing on how they present language, learners, and classroom participation. Teaching materials are often treated as practical classroom tools, but they also show particular views of what language learning should be. Using examples from commonly used Japanese and English textbooks, this paper compares grammar, tasks, and cultural content. Japanese materials often place language in specific social situations and guide learners toward accurate and appropriate use. English materials often give learners more opportunities to express personal ideas, exchange information, and take part in open-ended communication. These tendencies are not discussed as competing models. Instead, the paper considers what each approach can contribute to language teaching. The paper suggests that combining these strengths may help teachers and material developers design learning materials that support accuracy, meaningful communication, and intercultural reflection in multilingual higher education classrooms.



1. INTRODUCTION

This paper grew out of a presentation given at Lakeland University Japan in June 2026. The presentation began with a practical question that many language teachers recognize: when we compare Japanese and English language teaching materials, what can we learn about the way language learning is imagined? Textbooks are

often used as classroom tools, but they also carry assumptions about what counts as good language use, how learners should participate, and what kind of language user education should develop.

The comparison is useful because Japanese and English materials often make different choices. Japanese language materials tend to place grammar and vocabulary within concrete social situations,

such as making requests, speaking politely, or choosing expressions according to the relationship between speakers. English language materials, particularly communicative textbooks, often give learners more space to express personal ideas, exchange information, and develop independence in language use. These are tendencies rather than fixed categories, but they reveal different pedagogical priorities.

The purpose of this paper is not to rank one tradition above the other. Instead, it reflects on what each approach makes possible in the classroom. The paper argues that language teaching materials can become more useful when they combine attention to context and accuracy with opportunities for communication, learner choice, and intercultural reflection.

2. TEACHING MATERIALS AS PEDAGOGICAL DESIGN

Teaching materials do more than present language content. They organize classroom participation. A grammar explanation, a model dialogue, a substitution drill, a pair-work task, or a cultural comparison activity each suggests a particular view of how language should be learned. In this sense, teaching materials may be understood as a form of pedagogical design. They shape not only what learners study, but also how learners are invited to behave with language.

Research on language teaching materials has emphasized that materials reflect assumptions about learning, classroom interaction, and the roles of teachers and learners (Tomlinson, 2011). Similarly, communicative language teaching has encouraged attention to learners' ability to use language for meaning-making, not only to master grammatical forms (Canale & Swain, 1980; Richards & Rodgers, 2014). At the same time, language learning also involves socialization into appropriate forms of participation. Learners need to understand not only what a sentence means grammatically, but also when and how it may be used in relation to others.

For this reason, a comparison of Japanese and English teaching materials can make visible the

different ways textbooks imagine the learner. In the materials considered here, the Japanese side often imagines learners as people who need to participate appropriately in social situations. The English side often imagines learners as people who need to express their own ideas and interact with others. These two images can be brought together rather than treated as separate goals.

3. METHOD AND MATERIALS

This paper uses a qualitative and interpretive comparison of commonly used Japanese and English language teaching materials. The Japanese materials include beginner-level textbooks such as *Minna no Nihongo*, *Genki*, and *Marugoto*. These materials commonly feature situational dialogues, grammar patterns, usage notes, and attention to social appropriateness. The English materials include communicative textbooks such as *Interchange*, *Headway*, and *Touchstone*, although the discussion below uses selected examples rather than treating all textbooks equally. These materials often feature topic-based units, pair or group work, personalized production, and cultural comparison.

The analysis focuses on three areas: grammar, tasks, and cultural content. These areas were selected because they are central to textbook design and because they show how learners are expected to engage with language. The six titles examined here were selected as representative examples of commonly used beginner-level language teaching materials in Japanese higher education contexts. The aim is not to provide a statistical survey of all textbooks. Rather, the paper identifies recurring patterns and uses selected examples to support a reflective discussion of pedagogical design. Because this article is submitted as a critical reflection, the examples are used not as data for quantitative comparison but as points of departure for examining broader assumptions about language learning and textbook design.

4. COMPARATIVE REFLECTIONS

4.1. Grammar

One clear difference concerns the relationship between grammar and use. In Japanese materials,

grammar is often presented within defined social situations. For example, a structure such as *-te kudasai* (てください) form may be introduced through a request, followed by substitution practice. Learners may be asked to transform a verb form accurately or to insert a suitable word into a model sentence. The value of this design is that it gives learners a stable path from model form to correct use.

In English materials, grammar is often connected to personal meaning. A textbook may ask learners to complete a sentence such as “I’d like to go ____ this weekend,” and then compare answers with a partner. Another activity may ask learners to discuss what makes a good neighborhood or to state and defend an opinion. In this design, grammar functions not only as a form to be mastered, but also as a resource for expressing ideas.

This contrast can be summarized as follows: Japanese materials often ask, “Can you use the correct expression in this situation?” English materials often ask, “Can you use language to express your own idea?” Both questions matter. Accuracy without communication may become mechanical, while communication without sufficient accuracy may become unclear. A strong design needs to connect accurate form with meaningful use.

4.2. Tasks and Classroom Participation

A second difference appears in classroom tasks. Japanese materials often begin with controlled practice: model sentences, substitution drills, and short role-plays in defined situations. Such tasks are especially useful for beginners because they reduce the burden of producing language independently and help learners build confidence. They also connect language use with social situations, which is important in Japanese, where relationships and levels of politeness often shape expression.

English materials, by contrast, often move learners toward open-ended production. Pair work, small-group discussion, surveys, interviews, and project-style tasks ask students to use language as themselves. The answer is not always

predetermined. Learners are expected to express personal experience, ask follow-up questions, and negotiate meaning with classmates.

These task types can be seen as a continuum: controlled practice, meaningful practice, and open-ended production. The issue is not whether one side of the continuum is better. Learners need movement across the continuum. Controlled practice supports accuracy; meaningful practice connects form to use; open-ended production gives learners room to develop fluency and personal voice.

4.3. Culture and the Image of the Learner

Culture is also represented differently. In Japanese materials, culture often appears as situational appropriateness. Learners are asked to consider who is speaking to whom, where the interaction takes place, and what level of politeness is suitable. In this sense, culture is not presented only as information about Japanese society. It is built into the way language is chosen and used.

In English materials, culture more often appears through comparison, identity, and opinion. Learners may compare customs across countries, discuss daily life, or describe their own preferences and experiences. These activities invite learners to see themselves as participants in intercultural exchange. It should be noted, however, that this contrast is one of emphasis rather than presence: Marugoto, in particular, does include cross-cultural comparison tasks, though such activities are more consistently foregrounded in English communicative textbooks.

Together, these patterns suggest different images of the learner. Japanese materials often construct the learner as an appropriate participant who can choose forms according to relationship and context. English materials often construct the learner as an autonomous communicator who can express ideas and negotiate meaning. This paper proposes a third image: the flexible multilingual learner. Such a learner can use language accurately, appropriately, personally, and reflectively.

5. TOWARD AN INTEGRATED DESIGN

The comparison suggests that the two traditions

can be integrated in practical ways. A sample unit on making requests illustrates this point. The unit could begin with context: learners first examine a social situation, such as a new employee asking a supervisor for help, and decide which expression sounds appropriate. Next, learners practice accurate form, such as *-te kudasai* (てください), through controlled grammar work. Then, learners move into production by making real requests to classmates and responding naturally. Finally, learners reflect on how requests are made in their own languages and cultures. This sequence is summarized in Table 1.

Table 1. Sample Unit: Making Requests

Stage	Activity
Context	Learners examine a social situation, such as a new employee asking a supervisor for help, and decide which expression sounds appropriate.
Form	Learners practice accurate form, such as <i>-te kudasai</i> (てください), through controlled grammar work.
Production	Learners make real requests to classmates and respond naturally.
Reflection	Learners reflect on how requests are made in their own languages and cultures.

This sequence can be described as context, form, production, and reflection. The first two steps draw on the strengths of Japanese materials: social appropriateness and controlled accuracy. The last two steps draw on the strengths of communicative English materials: meaningful interaction and intercultural awareness. The sequence does not remove the value of accuracy. Rather, it places

accuracy inside a larger cycle of communication and reflection.

Such an integrated design may be especially useful in multilingual and intercultural higher education settings. Students need to use language accurately, but they also need to choose expressions according to relationships, explain their own meanings, and reflect on communication across cultures. Materials that support only one of these goals may leave learners with an incomplete view of language use.

6. IMPLICATIONS FOR TEACHERS AND MATERIAL DEVELOPERS

For teachers, the main implication is sequencing. A lesson does not need to remain at the level of grammar explanation or drill. Teachers can begin with context, move to form, extend practice into communication, and end with reflection. This does not require abandoning textbook materials. It requires using them as starting points and adding tasks that help learners move from controlled practice to personal communication.

For material developers, the implication is balance. Materials can include clear models and accurate practice while also making space for student choice and intercultural comparison. For example, a model dialogue can be followed by a short controlled drill, then by a personalized speaking task, and finally by a reflection question about similar expressions in students' first languages or other languages they know.

The broader implication is that language education should not force a choice between accuracy and communication. Learners need both. They also need awareness of context, relationship, identity, and culture. A more flexible design can help learners become not only correct speakers or active communicators, but language users who can move between different situations and expectations.

7. LIMITATIONS AND FUTURE DIRECTIONS

This paper is reflective and interpretive, and its examples are illustrative rather than exhaustive. It does not claim that all Japanese materials share one

design or that all English materials share another. Actual classroom use may also differ from textbook design. Teachers adapt materials, students respond in different ways, and local educational contexts shape how textbooks are used.

Future work should therefore include classroom observation, teacher interviews, and learner responses. It would also be useful to compare materials across proficiency levels and to examine digital and AI-assisted learning materials. These directions would allow the discussion to move from textbook comparison to the study of classroom interaction and learner experience.

8. CONCLUSION

This paper has compared Japanese and English language teaching materials as examples of pedagogical design. Japanese materials often highlight context, accuracy, and social relationships. English materials often highlight communication, learner choice, and personal voice. Rather than treating these as competing models, the paper has argued for bringing them together.

A stronger material design does not choose between accuracy and communication. It helps learners move between social appropriateness, personal expression, and intercultural understanding. By looking carefully at what each teaching tradition makes possible, teachers and material developers can design richer and more responsive materials for multilingual and intercultural classrooms. Ultimately, this integrated approach supports the development of the flexible multilingual learner: one who can use language accurately, appropriately, personally, and reflectively across diverse contexts.

ACKNOWLEDGEMENTS

This paper is based on a presentation given at Lakeland University Japan in June 2026. The authors are grateful to the participants for their questions and comments.

REFERENCES

- 3A Corporation. (2012). *Minna no Nihongo shokyū I: Honsatsu* (2nd ed.). 3A Network.
- Banno, E., Ikeda, Y., Ohno, Y., Shinagawa, C., & Tokashiki, K. (2020). *Genki I: An integrated course in elementary Japanese* (3rd ed.). The Japan Times.
- Canale, M., & Swain, M. (1980). Theoretical bases of communicative approaches to second language teaching and testing. *Applied Linguistics*, 1(1), 1–47.
- McCarthy, M., McCarten, J., & Sandiford, H. (2014). *Touchstone level 1 student's book* (2nd ed.). Cambridge University Press.
- Richards, J. C., Hull, J., & Proctor, S. (2013). *Interchange level 1 student's book* (4th ed.). Cambridge University Press.
- Richards, J. C., & Rodgers, T. S. (2014). *Approaches and methods in language teaching* (3rd ed.). Cambridge University Press.
- Soars, L., & Soars, J. (2019). *Headway beginner student's book* (5th ed.). Oxford University Press.
- The Japan Foundation. (2013). *Marugoto: Japanese language and culture. Starter A1 Katsudoo: Coursebook for communicative language activities*. Sanshusha.
- Tomlinson, B. (Ed.). (2011). *Materials development in language teaching* (2nd ed.). Cambridge University Press.

This page was intentionally left blank



Integrating Graphic Organizers and Cooperative Learning in EFL Reading: A Synergistic Framework for SLA, CLIL, and Social-Emotional Learning

Mayumi TSUBAKI, Ed.D.

Professor, Bunkyo Gakuin University, Faculty of Foreign Studies

FUTUREd, Volume 1, Issue 2 (2026)

Pages: 188 - 198

ISSN: 2760-8263 (print)

ISSN: 2760-8271 (online)

Keywords:

English as a foreign language (EFL), reading instruction, graphic organizers, cooperative learning

Corresponding author:

Mayumi Tsubaki

m-tsubaki@bgu.ac.jp



Abstract: Traditional English as a Foreign Language (EFL) reading instruction often overemphasizes bottom-up grammatical and lexical decoding, leading to passive comprehension, heightened language anxiety, and limited communicative output—ultimately failing to meet the communicative and holistic demands of contemporary English education. To overcome these pedagogical limitations, this position paper proposes a synergistic framework that systematically integrates graphic organizers (cognitive scaffolding) with cooperative learning structures (social scaffolding). Drawing upon the core tenets of Second Language Acquisition (SLA), the 4Cs framework of Content and Language Integrated Learning (CLIL), and Collaborative for Academic, Social, and Emotional Learning (CASEL) competencies, this paper demonstrates how visual tools and structured peer interactions mutually reinforce deep text processing and holistic learner development. Furthermore, this framework is operationalized through a concrete, three-stage instructional procedure (pre-, while-, and post-reading) utilizing various graphic organizers and culminating in an innovative, author-proposed K-W-L-F-T chart (Know, Want to know, Learned, Felt, Thought). By deliberately distinguishing factual understanding from affective responses and critical reasoning, the proposed model lowers the affective filter, fosters psychological safety, and transforms EFL reading into an active, meaning-focused, and socially supportive endeavor.

1. INTRODUCTION

In English as a Foreign Language (EFL) contexts where learners often have limited opportunities for natural spoken interaction, reading serves as the primary source of rich linguistic input (Grabe &

Stoller, 2019). Through extensive and regular exposure to written texts, learners can acquire new vocabulary incidentally (Nation, 2013) and develop overall communicative proficiency (Krashen, 2004). Furthermore, written texts provide learners with the autonomy to process

information at their own pace and revisit challenging sections. While reading was traditionally perceived as a passive decoding activity, contemporary applied linguistics views second language (L2) reading as an active, constructive process in which readers dynamically build meaning by integrating linguistic knowledge, background knowledge, and cognitive strategies (Grabe, 2009; Koda, 2005).

Nevertheless, many EFL learners encounter substantial difficulties in reading comprehension. In particular, they often struggle to identify main ideas, trace macro-level text structures, and synthesize information into a coherent mental representation. Graphic organizers serve as powerful cognitive scaffolding to alleviate these challenges by visually mapping text structures and externalizing logical relationships. Furthermore, when graphic organizers are implemented collaboratively within cooperative learning structures, they provide crucial social scaffolding, enabling students to co-construct deeper understanding through meaningful interaction and shared cognition.

Although previous studies have investigated graphic organizers and cooperative learning independently, few have explored how to systematically combine them in EFL reading classrooms. To address this pedagogical gap, this position paper proposes a synergistic framework that integrates graphic organizers with cooperative learning structures. The paper begins by reviewing the theoretical foundations of L2 reading comprehension. It then examines graphic organizers as visual cognitive tools and outlines the core principles of cooperative learning. Synthesizing these dimensions, the paper illustrates the synergistic benefits of this approach for Second Language Acquisition (SLA), Content and Language Integrated Learning (CLIL), and Social-Emotional Learning (SEL). Subsequently, it provides a concrete three-stage instructional procedure (pre-, while-, and post-reading) featuring an innovative, author-proposed K-W-L-F-T chart alongside other visual organizers. Finally, it outlines directions for future empirical research to rigorously validate this synergistic model.

2. READING: COGNITIVE PROCESSES AND SOCIAL FACTORS

Before discussing the integration of graphic organizers and cooperative learning, it is necessary to examine the multifaceted nature of reading and the cognitive mechanisms involved in text comprehension. The theoretical framing in this section is primarily grounded in the comprehensive work of Grabe and Stoller (2019) and Grabe and Yamashita (2022).

2.1. Cognitive Complexity and Interactive Processes in Fluent Reading

Grabe and Stoller (2019) identify seven distinct purposes of reading, ranging from searching for specific information to critiquing printed material; however, the primary goal in academic contexts is reading for general comprehension. Although fluent readers often perform this process effortlessly and automatically, reading for general comprehension involves intricate cognitive operations. A fundamental distinction is made between *skills* and *strategies*: skills refer to linguistic processing abilities that operate relatively automatically, whereas strategies denote conscious, deliberate actions employed by readers to monitor and enhance comprehension. While differentiating them based on conscious control is standard pedagogical practice, the dynamic nature of reading frequently creates an overlap between the two. Crucial reading strategies include previewing text structures, activating background knowledge, making inferences, and strategic rereading.

In addition, rapid and interactive processing constitutes an essential condition for fluent reading. Fluent readers decode text rapidly, allowing working memory to coordinate multiple cognitive operations simultaneously without overload. Reading is fundamentally interactive in two respects: first, bottom-up processing (word recognition, syntactic parsing) dynamically interacts with top-down processing (schemata, background knowledge stored in long-term memory); second, the reader actively negotiates meaning with the text.

2.2. Reducing Cognitive Load Through Graphic Scaffolding

Educators must recognize the extensive cognitive demands outlined above, which span reading purposes, fluent reading processes, component abilities, and diverse knowledge sources (Grabe & Stoller, 2019). The heavy cognitive load required to coordinate these parallel processes can be effectively mitigated through the strategic use of graphic organizers. By visually mapping discourse structures and hierarchical relationships, graphic organizers provide an external "big picture" of the text, facilitating the smooth interaction between bottom-up decoding and top-down conceptual synthesis (Jiang & Grabe, 2007).

2.3 Social and Contextual Dimensions of Reading

While cognitive mechanisms are central to reading, literacy development is equally embedded in social and cultural environments. Grabe and Yamashita (2022) emphasize that readers are shaped by broader socio-cultural contexts, identifying 12 distinct environmental and contextual factors. Among these, educational resources, institutional school climates, and peer interactions are directly relevant to cooperative learning. In particular, structured peer interaction provides critical social scaffolding that supports text interpretation, while sharing educational resources fosters collective efficacy. Moreover, cooperative reading instruction flourishes most effectively when the institutional climate prioritizes collaboration over individualistic competition.

In summary, while graphic organizers systematically alleviate cognitive demands, cooperative learning structures provide the social mediation necessary for collaborative meaning construction. Integrating these dual scaffoldings establishes an optimal pedagogical ecosystem for deep EFL reading comprehension.

3. GRAPHIC ORGANIZERS IN READING INSTRUCTION

3.1. Definitions, Types, Scaffolding Functions of Graphic Organizers

A graphic organizer (GO) is defined as a visual representation of knowledge that structures

information by arranging important aspects of a concept or topic into a coherent pattern using labels (Bromley et al., 1999, p. 6). Prominent types of graphic organizers include semantic maps, structured overviews, story webs, Venn diagrams, concept maps, vocabulary maps, and mind maps (Bromley et al., 1999; McKnight, 2010). These visual devices serve as cognitive scaffolds that guide EFL learners in identifying central themes and discerning rhetorical relationships that might otherwise remain implicit or cognitively overwhelming in dense L2 texts.

3.2. Theoretical Foundations of Graphic Organizers

The pedagogical efficacy of graphic organizers is grounded in cognitive schema theories. Grounded in Ausubel's (1968) Assimilation Theory and Novak and Gowin's (1984) concept mapping framework, GOs serve as visual anchors that explicitly link novel textual propositions to existing schemata. By helping learners externalize and hierarchically structure conceptual relationships, graphic organizers foster deep, meaningful comprehension rather than superficial rote memorization. Furthermore, Dual Coding Theory (Paivio, 1986; Sadoski & Paivio, 2001, 2004) provides robust cognitive support for the multimodal affordances of GOs. Dual Coding Theory posits that the human mind processes information through two separate yet interconnected channels: a nonverbal (visual/spatial) system and a verbal (linguistic) system. When EFL readers engage with texts multimodally—decoding textual propositions while mapping them visually onto a graphic organizer—additive, dual representations are constructed in memory. This synergistic dual processing reduces extraneous cognitive load in working memory and is expected to foster text comprehension and long-term retention.

3.3. Empirical Research: Graphic Organizers and Discourse Structure

Empirical investigations in L2 reading underscore the critical role of discourse structure awareness in text processing. Jiang and Grabe (2007) and Jiang (2012) demonstrate that graphic organizers that

explicitly reflect top-level discourse patterns (e.g., classification, cause-effect, problem-solution, comparison-contrast) significantly enhance L2 reading comprehension. When EFL readers are trained to recognize rhetorical organizations through visual representations, their ability to extract macro-level propositions, synthesize information, and produce coherent summaries improves markedly, effectively overcoming the word-by-word decoding bottleneck common among developing readers.

3.4. Pedagogical Challenges and the Need for Social Scaffolding

While graphic organizers offer undeniable cognitive benefits—namely, mitigating cognitive load, clarifying macro-structures, and promoting schema activation—their instructional implementation in EFL contexts presents notable challenges. When GOs are assigned merely as individual, teacher-directed seatwork, learners frequently resort to superficial, mechanical copying of isolated keywords from the text without genuinely synthesizing meaning. Moreover, overly complex organizers can inadvertently impose extraneous cognitive load on lower-proficiency readers in the absence of explicit strategic instruction.

To prevent graphic organizers from deteriorating into passive worksheets and to fully leverage their interactive potential, visual cognitive scaffolding must be coupled with social and communicative scaffolding. This imperative directly motivates the integration of graphic organizers within structured cooperative learning frameworks.

4. COOPERATIVE LEARNING

4.1. What is Cooperative Learning?

Cooperative learning can be understood through two influential perspectives: From the field of educational psychology, Johnson and Johnson (1993, p. 9) define cooperative learning as "the instructional use of small groups so that students work together to maximize their own and each other's learning." In second language acquisition (SLA), Jacobs, Power, and Loh (2002) define it as "principles and techniques for helping students

work together more effectively." While educators sometimes treat any pair or group work as cooperative learning, these definitions emphasize that structured cooperative learning requires high-quality, principled interaction rather than simply placing students together.

4.2. Theoretical Foundations of Cooperative Learning

Cooperative learning is grounded in social interdependence theory (Johnson & Johnson, 2009), sociocultural theory (Vygotsky, 1978), and the concept of the Zone of Proximal Development (ZPD; Vygotsky, 1978). Social interdependence theory highlights the importance of positive interdependence, in which individual efforts facilitate group success. Sociocultural theory further explains that cognitive development occurs through social interaction. Relatedly, the ZPD indicates that with the support of more knowledgeable others or collaborative peers, learners can achieve tasks they cannot accomplish independently. Together, these theories provide strong psychological and social support for cooperative learning.

Furthermore, cooperative learning is strongly aligned with three foundational SLA models: the Input Hypothesis (Krashen & Terrell, 1983), the Output Hypothesis (Swain, 1985), and the Interaction Hypothesis (Long, 1981). When students collaborate over texts, peer discussions simultaneously provide comprehensible input, elicit pushed output, and stimulate the negotiation of meaning essential for linguistic development.

4.3 Key Elements of Cooperative Learning

Specific structural elements distinguish cooperative learning from unstructured group activities. Two prominent frameworks are Johnson and Johnson's five elements and Kagan's PIES principles. Johnson and Johnson identify five essential elements: positive interdependence, individual accountability, face-to-face promotive interaction, interpersonal and small-group skills, and group processing. In comparison, Kagan summarizes key principles using the acronym PIES: Positive Interdependence, Individual Accountability, Equal Participation, and

Simultaneous Interaction. While both frameworks emphasize positive interdependence and individual accountability, Kagan specifically focuses on maximizing active student engagement through equal participation and simultaneous interaction across all groups.

4.3. Cooperative Learning Techniques and Classroom Applications

Several practical techniques can facilitate cooperative learning in language classrooms. Forming groups of four (or occasionally three) allows flexible transitions between pair and group discussions. In EFL contexts like Japan, providing learners with individual thinking time to take notes (in either L1 or L2) before discussion significantly lowers cognitive anxiety. Jacobs et al. (2002) also recommend assigning structured roles to group members, such as timekeeper, praiser, or facilitator, and providing functional target-language phrases for each role (e.g., "We have one minute left," or "That is a great idea"). These assigned roles promote equal participation and active involvement.

A representative technique that embodies these principles is the Round Robin. After an initial individual thinking period, each student takes turns sharing an idea until all members have contributed. This simple structure ensures equal participation and simultaneous interaction, reinforcing positive interdependence. Although cooperative learning is effective in various educational contexts, combining these structured social activities with graphic organizers offers distinct advantages for L2 reading comprehension, as discussed in the next section.

5. THEORETICAL SYNERGY: INTEGRATING GRAPHIC ORGANIZERS

The systematic integration of graphic organizers (cognitive scaffolding) and cooperative learning structures (social scaffolding) is theoretically anchored in three complementary frameworks: Second Language Acquisition (SLA), Content and Language Integrated Learning (CLIL), and Social-Emotional Learning (SEL). Together, these perspectives explain how visual mapping and peer

mediation synergistically foster cognitive, linguistic, and socio-emotional development in EFL reading contexts.

5.1. Second Language Acquisition: Input, Output, and Interactional Scaffolding

First, this integrated approach creates ideal learning conditions supported by major SLA theories. When learners work together on a shared graphic organizer, they discuss text interpretations, solve comprehension problems, and share their personal reactions. This collaborative dialogue encourages students to produce meaningful English through speaking and writing, generating both comprehensible and pushed output (Swain, 1985, 1995). At the same time, listening to peer explanations and reviewing each other's graphic organizers provides rich, comprehensible input (Krashen, 1982, 1985). Furthermore, based on the Interaction Hypothesis (Long, 1981, 1996), negotiating meaning during structured group tasks helps students notice language forms and make self-corrections, which supports language development. Combining the visual structure of a graphic organizer with oral group interaction provides multimodal scaffolding that helps reduce cognitive load.

5.2. CLIL: Realizing the 4Cs Framework in the EFL Reading Classroom

Second, Content and Language Integrated Learning (CLIL; Coyle, 2007; Coyle et al., 2010) offers a robust conceptual model through its interconnected "4Cs" framework: Content, Communication, Cognition, and Culture (Community). As Coyle et al. (2010) emphasize, CLIL developed not merely as an innovative language methodology in a globalized era, but as an educational response to broader societal demands for holistic competence. Integrating graphic organizers into cooperative reading tasks operationalizes all four dimensions concurrently, as summarized in Table 1.

Table 1 Operationalization of the CLIL 4Cs Framework via Graphic Organizers and Cooperative Learning

CLIL Dimension	Instructional Application
Content	Organizing, understanding, and summarizing main ideas and key text information through visual mapping.
Communication	Using English naturally as students discuss text meaning, share ideas, and give peer feedback using graphic organizers.
Cognition	Using graphic organizers to apply higher-order thinking skills, analyze text structures, evaluate details, and connect concepts.
Culture / Community	Building a supportive classroom community where students respect diverse perspectives and develop empathy.

Note. Adapted from Coyle (2007) and Coyle et al. (2010).

5.3. Social-Emotional Learning: Fostering Psychological Safety and Self-Regulation

Third, the Social and Emotional Learning (SEL) framework (CASEL, 2020) highlights the affective and interpersonal benefits of this integration. While cooperative learning is often used to improve academic achievement, its structured activities also help students develop five core SEL competencies: self-awareness, self-management, social awareness, relationship skills, and responsible decision-making. In this integrated approach, graphic organizers serve as both

cognitive and emotional scaffolds. By making abstract text structures visual and clarifying task expectations, graphic organizers reduce reading anxiety and help students build self-confidence. This increased psychological safety lowers the affective filter, allowing learners to share their ideas comfortably and support one another in small groups.

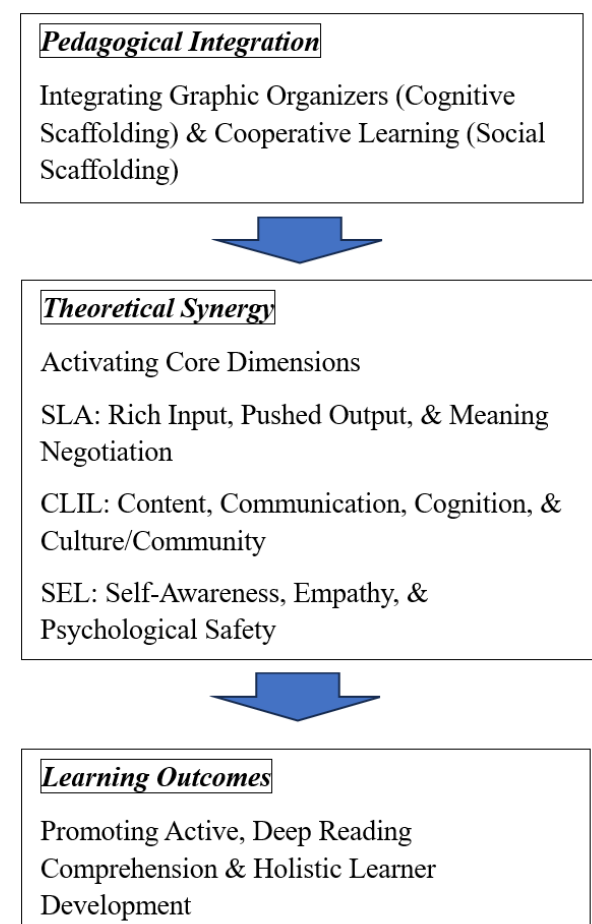


Figure 1. Conceptual flow of the synergistic framework for SLA, CLIL, and SEL in EFL Reading

In summary, integrating graphic organizers with cooperative learning brings together the core insights of SLA, CLIL, and SEL into a unified framework, as shown in Figure 1. While graphic organizers provide visual and cognitive scaffolding to clarify text meaning and structure (SLA input and CLIL content/cognition), cooperative learning structures offer social scaffolding that encourages active discussion and mutual emotional support (SLA output/interaction, CLIL communication, and SEL competencies). By addressing cognitive

processing, language development, and emotional well-being simultaneously, this combined model transforms EFL reading from a passive, individual task into an interactive, holistic learning experience.

The next section illustrates how teachers can apply this theoretical framework in the classroom through a concrete three-stage instructional procedure.

6. PRACTICAL CLASSROOM APPLICATION: A THREE-STAGE PROCEDURE

To bridge the theoretical framework with instructional practice, this section presents a structured, three-stage pedagogical procedure for EFL reading lessons: pre-reading, while-reading, and post-reading. Each stage combines a specific graphic organizer with a structured cooperative learning technique, operationalizing cognitive scaffolding, social interaction, and socio-emotional development.

6.1. Pre-Reading Stage: Activating Schema and Fostering Engagement

Instructional components

Graphic Organizer: K-W-L Chart (Ogle, 1986). A three-column visual framework consisting of What I Know (K), What I Want to Know (W), and What I Learned (L), designed to activate prior knowledge and elicit inquiry questions.

Cooperative Learning Structure: Write, Pair, Switch (Jacobs et al., 2002). A structured interaction pattern in groups of four that alternates individual reflection with timed, rotating pair discussions to promote equal participation.

Implementation Steps

Step 1 (Grouping): The teacher assigns students to heterogeneous groups of four (or groups of three when necessitated by class size).

Step 2 (Individual Schema Activation): Each student silently examines the title, illustrations, and

accompanying visual cues related to the passage to activate relevant background schema.

Step 3 (Completing the K and W Columns): Working individually, students record what they already know (K) and formulate questions about what they want to know (W), using multi-colored pens or simple sketches.

Step 4 (Initial Pair Sharing): Students form internal pairs (e.g., Student A with B, Student C with D) and share their notes under an explicit time limit (e.g., two minutes per speaker) signaled by the teacher.

Step 5 (Partner Switch): Students switch partners within the same group (e.g., Student A with C, Student B with D) and repeat the structured oral sharing.

Pedagogical Rationale

Providing dedicated Think Time during individual completion of the graphic organizer serves as an essential affective scaffold, helping to alleviate foreign language anxiety and supporting emotional self-regulation (SEL). Furthermore, structured turn-taking with explicit time constraints ensures individual accountability and positive interdependence (CL), while multiple low-stakes peer interactions provide varied comprehensible input and low-anxiety communicative output (SLA).

6.2. While-Reading Stage: Structuring Discourse and Constructing Meaning

Instructional components

Graphic Organizer: Mind Map / Concept Web.

A branching visual organizer that positions the central theme or thesis statement at the core, connecting primary branches for paragraph themes and secondary branches for supporting details. While inspired by Buzan's (1974) mind mapping, the organizer in this framework is adapted primarily as a pedagogical concept web to scaffold text-structure analysis rather than free-associative brainstorming. Additionally, for narrative passages, a story map can be utilized to visualize plot

structure, character development, and narrative arcs.

Cooperative Learning Structure: Round Robin with Assigned Roles (Jacobs et al., 2002; Kagan, 1994). A collaborative structure in which four group members co-construct a single shared artifact while executing distinct functional roles.

Implementation steps

Step 1 (Silent Reading): Students read the text individually, marking central ideas, paragraph themes, and key supporting evidence on their own rough worksheets.

Step 2 (Role Assignment): Within each group of four, students assume designated roles: Reader/Summarizer (presents designated sections orally), Recorder (draws and writes the shared Mind Map), Timekeeper (monitors section pacing), and Praiser/Encourager (provides supportive feedback).

Step 3 (Collaborative Mapping via Round Robin): Following the structural progression of the text, students take turns presenting their identified points clockwise. The group negotiates the logical placement of each concept before the Recorder incorporates it into the shared Mind Map.

Step 4 (Visual Elaboration): The group enriches the Mind Map using color coding, arrows, and symbols to represent hierarchical, causal, and contrastive relationships across discourse units.

Pedagogical rationale

The collaborative Mind Map transforms abstract discourse structures into tangible cognitive representations, reducing processing load during complex reading (Cognition; CLIL). The transition from individual processing to group synthesis facilitates authentic negotiation of meaning and spoken output (SLA). Distributing functional roles ensures equitable participation and eliminates free-rider effects (CL), while the presence of encouraging roles cultivates psychological safety and relational competence (SEL).

6.3. Post-Reading Stage: Critical Reflection and Affective Synthesis

Instructional components

Graphic Organizers: K-W-L-F-T Chart (proposed by the author), K-W-L (Ogle, 1986), or K-W-L-T (McKnight, 2010). The primary framework introduced here is the **K-W-L-F-T Chart**, which expands traditional models by adding **What I Felt (F)** for affective awareness and **What I Thought (T)** for critical reasoning alongside factual comprehension (L).

When teachers use the traditional **K-W-L** chart, students write about what they learned (L) and discuss whether the questions they formulated during the pre-reading stage (W) have been answered through cooperative interaction. Similarly, if the **K-W-L-T** chart is selected, students write summaries or personal statements (T: *What I Want to Tell/Talk About*) in sentences or short paragraphs and share them within their groups. In addition, this optional note box—**What I Want to Tell**—can also be incorporated into the K-W-L-F-T chart to help students organize speaking points for oral retelling and group discussion.

Cooperative Learning Structure: Three-Step Interview and Group Processing (Jacobs et al., 2002; Kagan, 1994). This structure combines a paired interview routine with team reporting and collaborative self-evaluation of social skills.

Implementation steps

Step 1 (Individual Reflection and Completion): Students complete the L column for factual understanding, the F column for affective reactions, and the T column for personal opinions and critical viewpoints.

Step 2 (Pair Interview): In pairs (Student A and Student B), Student A shares their feelings and critical thoughts for two minutes while Student B engages in active listening and note-taking. Upon the teacher's signal, roles are reversed for another two minutes.

Step 3 (Group Reporting): Returning to their four-member teams, each student delivers a concise summary of their partner's affective and cognitive responses in a round-robin format.

Step 4 (Group Processing): Teams spend two minutes reviewing their collaborative performance against a cooperative checklist, reflecting on active listening, mutual encouragement, and psychological safety.

Pedagogical rationale

The K-W-L-F-T chart bridges text-level comprehension, cognitive processing, and socio-emotional development. Prompting learners to articulate emotional responses (F) lowers the affective filter and fosters emotional self-regulation, while documenting critical reflections (T) scaffolds higher-order thinking (CLIL Cognition; CASEL Self-Awareness). Structured pair interviews scaffold oral retelling without the pressure of unguided speech (SLA Output; Relationship Skills), and regular group processing reinforces interpersonal accountability and empathy.

7. CONCLUSION AND PEDAGOGICAL ISSUES

This paper has argued that integrating graphic organizers into cooperative learning environments holds strong promise for enhancing EFL reading pedagogy. By providing multimodal scaffolding, this integrated approach aligns with foundational SLA theories—facilitating comprehensible input, meaningful output, and authentic negotiation of meaning—which ultimately fosters deeper text comprehension and vocabulary acquisition. Furthermore, this pedagogical synergy addresses the core components of both Content and Language Integrated Learning (CLIL) and Social and Emotional Learning (SEL), promoting learners' cognitive, linguistic, social, and emotional development. The visual scaffolding of graphic organizers and the interpersonal structure of cooperative learning reinforce each other, providing psychological safety and cognitive clarity for learners across various proficiency

levels, from primary education to adult learning.

To validate and expand upon this pedagogical framework, future empirical studies employing both quantitative and qualitative methods are strongly recommended. Such research should investigate not only traditional language gains, such as reading comprehension and vocabulary retention, but also affective and psychological factors, including foreign language anxiety, learner self-efficacy, and social attitudes.

Finally, the successful implementation of this integrated approach requires systematic training for both teachers and students. Teachers need pedagogical guidance on how to select appropriate graphic organizers and structure cooperative roles, while learners must be guided in collaborative skills and emotional self-regulation. Through thoughtful integration and structured practice, graphic organizers and cooperative learning can transform the EFL reading classroom into a collaborative, intellectually engaging, and emotionally supportive learning environment.

ACKNOWLEDGEMENTS

This work was supported in part by JSPS KAKENHI Grant Number [JP 22K00770], as well as by institutional collaborative research funds and the President's Discretionary Research Grant from Bunkyo Gakuin University, the author's affiliated institution. The author is deeply grateful for this support and for the valuable feedback and preliminary data contributed by students and colleagues during the exploratory phases of developing this graphic organizer framework. The author also acknowledges the use of Microsoft Copilot and Google Gemini for linguistic refinement, English proofreading, and citation formatting assistance during manuscript preparation. All conceptual models, pedagogical proposals, and final editorial decisions remain solely the responsibility of the author.

REFERENCES

- Ausubel, D. P. (1968). *Educational psychology: A cognitive view*. Holt, Rinehart and Winston.
- Bromley, K., Irwin-DeVitis, L., & Modlo, M. (1999). *50 graphic organizers for reading, writing & more*. Scholastic Professional Books.
- Buzan, T. (1974). *Use your head*. BBC Publications.
- CASEL. (2020). *CASEL's SEL framework: What are the core competence areas and where are they promoted?* Collaborative for Academic, Social, and Emotional Learning. <https://casel.org/sel-framework/>
- Coyle, D. (2007). Content and Language Integrated Learning: Towards a connected research agenda for CLIL pedagogies. *International Journal of Bilingual Education and Bilingualism*, 10(5), 543–562. <https://doi.org/10.2167/beb459.0>
- Coyle, D., Hood, P., & Marsh, D. (2010). *CLIL: Content and Language Integrated Learning*. Cambridge University Press. <https://doi.org/10.1017/9781009024648>
- Grabe, W. (2009). *Reading in a second language: Moving from theory to practice*. Cambridge University Press. <https://doi.org/10.1017/CBO9781139150484>
- Grabe, W., & Stoller, F. L. (2019). *Teaching and researching reading* (3rd ed.). Routledge. <https://doi.org/10.4324/9781315726274>
- Grabe, W., & Yamashita, J. (2022). *Reading in a second language: Moving from theory to practice* (2nd ed.). Cambridge University Press. <https://doi.org/10.1017/9781108882064>
- Jacobs, G. M., Power, M. A., & Loh, W. I. (2002). *The teacher's sourcebook for cooperative learning: Practical techniques, basic principles, and frequently asked questions*. Corwin Press.
- Jiang, X. (2012). The role of graphic organizers in foreign language reading comprehension. *Reading in a Foreign Language*, 24(1), 84–108.
- Jiang, X., & Grabe, W. (2007). Graphic organizers in reading instruction: Research findings and issues. *Reading in a Foreign Language*, 19(1), 34–55.
- Johnson, D. W., & Johnson, R. T. (1993). *Learning together and alone: Cooperative, competitive, and individualistic learning* (4th ed.). Allyn & Bacon.
- Johnson, D. W., & Johnson, R. T. (2009). An educational psychology success story: Social interdependence theory and cooperative learning. *Educational Researcher*, 38(5), 365–379. <https://doi.org/10.3102/0013189X09339057>
- Kagan, S. (1994). *Cooperative learning*. Kagan Cooperative Learning.
- Koda, K. (2005). *Insights into second language reading: A cognitive approach*. Cambridge University Press. <https://doi.org/10.1017/CBO9781139524841>
- Krashen, S. D. (1982). *Principles and practice in second language acquisition*. Pergamon Press.
- Krashen, S. D. (1985). *The input hypothesis: Issues and implications*. Longman.
- Krashen, S. D. (2004). *The power of reading: Insights from the research* (2nd ed.). Libraries Unlimited.
- Krashen, S. D., & Terrell, T. D. (1983). *The natural approach: Language acquisition in the classroom*. Alemany Press.
- Long, M. H. (1981). Input, interaction, and second-language acquisition. *Annals of the New York Academy of Sciences*, 379(1), 259–278. <https://doi.org/10.1111/j.1749-6632.1981.tb42014.x>
- Long, M. H. (1996). The role of the linguistic environment in second language acquisition. In W. C. Ritchie & T. K. Bhatia (Eds.), *Handbook of second language acquisition* (pp. 413–468). Academic Press. <https://doi.org/10.1016/B978-012589042-7/50015-3>
- McKnight, K. S. (2010). *The teacher's big book of graphic organizers: 100 reproducible organizers that help kids with reading, writing, and the content areas*. Jossey-Bass.
- Nation, I. S. P. (2013). *Learning vocabulary in another language* (2nd ed.). Cambridge University Press. <https://doi.org/10.1017/CBO9781139858656>
- Novak, J. D., & Gowin, D. B. (1984). *Learning how to learn*. Cambridge University Press. <https://doi.org/10.1017/CBO9781139173469>
- Ogle, D. M. (1986). K-W-L: A teaching model

that develops active reading of expository text.
The Reading Teacher, 39(6), 564–570.
<https://doi.org/10.1598/RT.39.6.11>

Paivio, A. (1986). *Mental representations: A dual coding approach*. Oxford University Press.

Sadoski, M., & Paivio, A. (2001). *Imagery and text: A dual coding theory of reading and writing*. Lawrence Erlbaum Associates.
<https://doi.org/10.4324/9781410600318>

Sadoski, M., & Paivio, A. (2004). Toward a unified theory of reading, writing, and instructional texts: A dual coding approach. In R. B. Ruddell & N. J. Unrau (Eds.), *Theoretical models and processes of reading* (5th ed., pp. 1329–1362). International Reading Association.
<https://doi.org/10.1598/0872075028.47>

Swain, M. (1985). Communicative competence: Some roles of comprehensible input and comprehensible output in its development. In S. M. Gass & C. G. Madden (Eds.), *Input in second language acquisition* (pp. 235–253). Newbury House.

Swain, M. (1995). Three functions of output in second language learning. In G. Cook & B. Seidlhofer (Eds.), *Principle and practice in applied linguistics: Studies in honour of H. G. Widdowson* (pp. 125–144). Oxford University Press.

Vygotsky, L. S. (1978). *Mind in society: The development of higher psychological processes*. Harvard University Press.

This page was intentionally left blank

Acknowledgements

FUTUREd would like to thank the members of the Editorial Board, the authors, and the reviewers whose time and care made this second issue possible. We are also grateful to Lakeland University Japan for its continued support of the journal.

© 2026 by the authors.

Published in FUTURED: Future Trends in University Research and Education.

This work is licensed under a Creative Commons Attribution 4.0
International License (CC BY 4.0).

