

# Multimedia-Supported Differentiation in Japanese English Classrooms

HARADA, Mayuko

(Toita Women's College)

## 1. Introduction

This study explores Japanese junior high school English teachers' perceptions of Differentiated Instruction [DI] and the use of multimedia in listening instruction. Based on thematic analysis of interviews with eight teachers, the study identifies both facilitators and barriers to multimedia-supported DI. Teachers often equated DI with individualized instruction and faced challenges in technology use and regional disparities in device quality. The study highlights implications for policy, teacher training, and resource development.

### 1.1. Introduction to DI

In the language classroom, teachers need to respect the differences among students. Knowledge, background, individual interests, and suitable learners' learning styles are different. Teaching diverse students using the same tasks and the same progression may result in learners not learning effectively (Ortega et al., 2018). For instance, using uniform learning methods in a mixed class of students with proficiency levels ranging from A1 to B1 according to the Common European Framework of Reference for Languages [CEFR] (Council of Europe, 2020) may prevent A1 students from progressing and restrict B1 students' further development.

In a classroom setting, differentiation is a learning philosophy that respects students' differences. Differentiation aims to tailor the learning process to the learner's needs by offering multiple task options (Tomlinson & Imbeau, 2023). The concept of incorporating differentiation into instruction is DI.

Carol Ann Tomlinson has been a leading researcher in differentiation, advocating DI as a teaching and learning philosophy. Tomlinson has continuously advocated the importance of the definition and principles of differentiation in education from the late 1990s to the present in 2023 (Eikeland & Ohna, 2022; Tomlinson & Allan, 2000; Tomlinson & Imbeau, 2023). Tomlinson's emphasis on differentiation also included a discussion of various definitions. Reis and Renzulli (2018) defined DI as an instructional strategy. However, Tomlinson and Imbeau (2023) pointed out that

defining DI as a strategy is incorrect and it should be defined as an instructional philosophy. Therefore, Tomlinson and Imbeau's (2023) definition is applied in this research.

## **1.2. Research aims and rationale**

Japan's Ministry of Education [MEXT] has promoted DI under the name Kobetsu-saitekika since 2021 (MEXT, 2021). While it aims to support diverse learners, it is often misunderstood as individualized instruction. In response to the COVID-19 pandemic, MEXT also introduced one tablet per student in public junior high schools, encouraging multimedia use in language instruction. However, MEXT (2017a)'s surveys show that students' English listening skills remain low, highlighting a need to improve listening instruction. Drawing on TESOL training and global practices, this study investigates how multimedia can support DI in Japanese junior high schools. The research explores:

- How do English teachers in Japan conceptualize differentiation in teaching?
- How do teachers think multimedia can support differentiated listening tasks?
- What challenges do teachers face in using multimedia instruction?

## **2. Literature Review**

### **2.1. Conceptual Framework of DI**

This study investigates how Japanese junior high school English teachers perceive the use of multimedia to facilitate Differentiated Instruction [DI] in listening tasks. DI is an educational approach designed to address diverse student needs by offering multiple pathways to achieve common learning goals. Based on learner-centered principles, DI encourages flexibility in content, learning processes, and outcomes. Tomlinson and Imbeau (2023) argue that DI ensures equitable access to education by adapting instruction according to student readiness, interests, and learning profiles. However, DI research has been largely centered on Tomlinson's framework, with relatively limited development from other theoretical perspectives (George, 2005; O'Meara, 2010). This overreliance on a single perspective may constrain how educators interpret DI, potentially reducing it to a set of strategies rather than a broader educational philosophy.

Empirical studies have shown that DI can promote learner autonomy, motivation, and reflective engagement. For instance, when students are provided with appropriate choices in learning tasks, they are encouraged to reflect on their needs and learning preferences, which increases ownership of learning (López-Barrios & de Debat, 2014). However, these benefits depend heavily on how options are designed. If choices are not aligned with learners' actual needs or fail to represent

meaningful differentiation, they may become superficial and ineffective. It is therefore essential for teachers to purposefully design task options that correspond to varying levels of readiness and interest.

Collaborative learning, often included as part of DI, has also been shown to contribute positively to both linguistic and interpersonal skill development (Ismail & Al Allaq, 2019). Through peer interaction, students have opportunities to express their ideas and respond to others, fostering deeper engagement. However, such collaboration is not without challenges. Lower proficiency learners may rely heavily on stronger peers, potentially limiting their opportunities to develop (Tamimy et al., 2023). This evidence indicates that while collaboration supports differentiation, it also requires careful teacher planning to ensure all learners benefit equitably.

## **2.2. DI in EFL Settings**

Teachers' perceptions of DI vary across English as a Foreign Language [EFL] contexts. In Uzbekistan, for example, DI has been misinterpreted as communicative language teaching, emphasizing student conversation without sufficient attention to differentiated support (Jamoliddinova & Kuchkarova, 2022). On the other hand, teachers in Hungary emphasize DI as a way to respond to learners' readiness levels, interests, and learning preferences (Kótay-Nagy, 2023). Institutional contexts and national policies significantly shape the concept of DI, as these contrasting interpretations suggest. Clearer teacher education on DI principles could help prevent such misunderstandings and promote more consistent implementation.

Barriers to DI implementation have also been widely reported. Lavania and Nor (2021), for example, identified challenges such as large class sizes, complex textbooks, and limited preparation time. While these external factors pose valid difficulties, they also reflect deeper systemic issues. In many cases, the lack of institutional support and structured professional development limits teachers' ability to apply DI effectively. Addressing these underlying factors is essential for DI to move beyond theory into classroom practice.

Another factor discussed in DI research is teaching experience. Moosa and Shareefa (2019) found that teachers with 8 to 12 years of experience were more confident in applying DI techniques than their less experienced counterparts. Conversely, Dema et al. (2022) reported that experience did not significantly influence DI awareness, as both novice and veteran teachers considered DI necessary. These mixed findings suggest that experience alone may not be a

decisive factor in DI implementation. Instead, how teachers are supported through training and resources may be more influential in shaping their understanding and use of DI.

### **2.3. Multimedia and Listening Instruction in the Japanese Context**

Recently, the use of multimedia has become increasingly relevant to DI. Technology enables teachers to offer diverse learning materials and allows students to interact with content in varied ways, including adjusting pace and visual reinforcement. In listening instruction, such features allow learners to process information based on their individual needs, which aligns with the goal of DI. However, not everyone realizes the full potential of multimedia. Healey et al. (2011) notes that technical issues, lack of teacher training, and difficulties judging material credibility can hinder effective use. Similarly, Zhang (2016) argues that teachers accustomed to traditional methods often struggle with integrating multimedia tools. In Japan, these issues may be particularly salient, as the widespread use of digital tools in schools is relatively recent.

Japanese junior high school English classes have traditionally focused more on reading aloud and grammar than on listening skill development. According to surveys by Benesse (2016) and MEXT (2017a), activities targeting listening are limited, and few teachers report receiving training in this area. This suggests a gap between curriculum goals and classroom practice. Despite the recognized need for input-based instruction, differentiated listening activities remain uncommon. Without adequate training or access to differentiated materials, teachers may lack both the skills and confidence to implement DI in listening instruction.

Multimedia, when effectively integrated, can address some of these challenges by providing adjustable and engaging input for students. However, technology alone is not enough. Teacher training, accessible material banks, and systemic support are critical for realizing the potential of DI. The current lack of emphasis on listening and the rarity of differentiated listening tasks in Japanese classrooms highlight the urgency of exploring this issue further. This study responds to that need by examining how teachers conceptualize DI and use multimedia in their listening instruction. In doing so, it aims to clarify whether DI is understood as a flexible philosophy and whether multimedia is used as a meaningful tool to support diverse listening needs.

## **3. Methodology**

In this chapter, I provide justification for the application of semi-structured interviews that are used to understand teachers' perceptions of Differentiated

Instruction [DI] and the use of multimedia. This chapter also demonstrates that trustworthiness in research is addressed by articulating the process of data collection through snowball sampling and how ethical issues are addressed.

### 3.1. Participants and sampling methods

Snowball sampling was used to recruit English teachers from Japanese public junior high schools, as the researcher had limited direct access to eligible participants. Initial contact was made with former supervising teachers at the researcher's own junior high school, who then introduced others. Participants had to meet two criteria: (1) experience teaching English at a Japanese public junior high school and (2) experience using multimedia in English classes.

This approach yielded eight volunteers—six women and two men—from Tokyo, Hyogo, and Hiroshima (Table 1). While most participants were based in Tokyo, the sample included both current and retired teachers. Three were in service at the time of data collection, and five were retired within the past six years. The start of the academic year and school events affected earlier recruitment efforts, leading some teachers to join during summer break. Even though the group of participants is small and not very diverse in location and gender, the clear selection rules and the range of teaching experience from 0.2 to 30 years make the study reliable and provide valuable information for future research on DI and multimedia in Japanese public schools.

**Table 1**

*A summary of participants*

Participant	Gender	Teaching experience	Prefecture	Class size
P1	Female	28	Tokyo	17
P2	Female	0.6	Kanagawa	37
P3	Male	0.6	Hyogo	40
P4	Female	3	Hiroshima	12
P5	Male	30	Tokyo	24
P6	Female	6	Tokyo	24
P7	Male	4	Tokyo	25
P8	Female	0.2	Tokyo	24

### 3.2. Data collection

Because all eight participants were based in Japan, individual online interviews were conducted to minimize logistical challenges. Semi-structured interviews were chosen to balance pre-planned questions with flexibility, accommodating

participants' varied backgrounds and teaching experience. This format supported the study's aim of understanding how teachers interpret DI. Google Meet was used due to its unlimited free access, and interviews were recorded via OBS Studio for security and data retention. Although participants could reveal their faces, two chose to speak only because of privacy concerns and technical difficulties.

### **3.3. Pilot study**

To prepare for interviews with eight participants, a pilot study was conducted in May 2023 with two Japanese individuals experienced in English teaching. This allowed the researcher to refine the interview process and confirm the clarity of consent procedures. As both the participants and researcher were native Japanese speakers, Japanese was used in the interviews to avoid misinterpretation and ensure comfort, a preference also expressed by the participants. Interview durations varied due to differences in teaching experience, confirming the need for flexibility in semi-structured interviews. The researcher also confirmed interpretations during the interviews to enhance credibility. Revisions based on this pilot informed the final interview protocol.

### **3.4. Data analysis**

In this study, thematic analysis was employed to explore how Japanese junior high school English teachers conceptualize DI and use multimedia in listening instruction. As the research investigates individual beliefs and classroom practices shaped by personal and institutional contexts, a method that captures both explicit responses and implicit perspectives was essential. Thematic analysis, explained by Braun and Clarke (2006), offers a flexible and thorough way to find patterns in qualitative data, which makes it a great fit for the interpretive approach of this study.

This framework allows researchers to go beyond surface-level descriptions and generate nuanced insights into participants' understanding. Its systematic six-phase process—familiarization, coding, theme development, and refinement—supports analytical clarity while accommodating the complexity of real-world educational contexts. Byrne (2022) and Terry et al. (2017) highlight the value of this method in producing credible and transferable findings, particularly in qualitative research that seeks to inform practice.

In this research, I repeatedly listened to the interview recordings, took analytic notes, and followed Braun and Clarke (2006)'s phases to code and refine themes. This process helped uncover shared patterns while preserving individual differences. The resulting themes provided not only descriptive summaries of the

data but also pointed toward practical implications for teacher training and DI policy in Japan.

Due to the extensive length of the interviews, ranging from 30 to 45 minutes, only one transcription was translated from Japanese into English and included in Appendix. The transcripts of the other seven participants are securely retained by the researcher.

Overall, thematic analysis served as an effective tool for capturing the richness of teacher voices and aligning those perspectives with broader pedagogical frameworks.

#### 4. Findings

##### 4.1. Reasons for Valuing DI

Multiple factors shape teachers' understanding of Differentiated Instruction [DI]. Three major themes were identified: organization, students' needs, and instructional style (Table 2).

**Table 2**

*Themes of reasons for valuing DI*

Theme	Sub-theme
1. Organization	a. MEXT
	b. Board of Education
2. Students' needs	c. Proficiency level
	d. Additional learning needs
	e. Nationality
3. Instructional style	f. Individualized instruction

Institutional influence, particularly from MEXT and local Boards of Education, plays a significant role. For instance, P8 stated they became aware of DI due to MEXT's use of the term 'Kobetsu-saitekika,' though it was interpreted as individualized instruction. Similarly, P5 noted the implementation was driven by district-level policies, showing that DI is often viewed as a policy requirement rather than a pedagogical choice.

Teachers also cited student diversity as a driving force behind DI. A common concern was students' varied proficiency levels. P2 mentioned, "I have no choice but to set a target at the average," while P1 expressed attempts to adjust for different levels. However, participants lacked clarity on how to apply DI principles.

Additional needs, such as literacy difficulties or classroom behavior, were also noted. Furthermore, nationality was another consideration, particularly for students with limited Japanese proficiency, which made English instruction more difficult. When DI is implemented in the classroom, employing Japanese as a supplementary language is generally effective in promoting English comprehension among the majority of students. Nevertheless, the situation becomes more complex in the case of returnees or international students who possess limited proficiency in both Japanese and English, despite having greater facility in another language that is not indispensable for daily life in Japan. P2 expressed concern that it would be impracticable for teachers to consistently draw upon each student's strongest language in such circumstances.

In terms of instructional style, many teachers equated DI with one-on-one or highly individualized instruction. P5 described DI as "extensive support to one student," and P1 emphasized "Kobetsu-saitekika." Even after clarifying DI principles, this understanding persisted. Teaching experience did not necessarily lead to greater awareness of DI. For example, P1 (28 years of experience) admitted to first thinking about DI during the interview, while P8, a novice teacher, had already implemented tasks offering multiple difficulty levels.

## 4.2. Using Multimedia in Listening Teaching

### 4.2.1 Positive Aspects of Using Multimedia

All participants had used tablets or laptops in English listening instruction, with usage expanding due to devices provided during the COVID-19 pandemic. Three themes emerged: quality of English, cognitive processes, and motivation (Table 3).

**Table 3**

***Themes of positive aspects of using multi-media in listening teaching***

Theme	Sub-theme
1. Quality of English	a. Native speaker's English
2. Cognitive Processes	b. Visual information c. Adjusting the load
3. Motivation	d. Interest e. Proactivity f. Noticing

Teachers valued access to native-speaker English, often associated with American accents (P5, P6). Visual elements such as subtitles, animations, and color aided

comprehension (P7). Multimedia allowed students to adjust the learning load via speech speed or transcription, helping personalize instruction.

Teachers also highlighted increased student motivation. Apps and games made learning enjoyable (P7), and real-world content like movies and concert videos engaged students more deeply (P1, P3, P5). P6 noted students proactively used apps to identify and correct listening errors, enhancing independent learning. Teachers saw multimedia as promoting implicit learning by helping students notice their own mistakes.

#### 4.2.2. Negative Aspects of Using Multimedia

Despite benefits, challenges included technological issues and regional differences. Equipment malfunctions, weak connections, and storage problems were common (Table 4).

**Table 4**

***Themes of negative aspects of using multi-media in listening teaching***

<b>Theme</b>	<b>Sub-theme</b>
1. Technological issues	a. Equipment malfunctions
	b. Related knowledge
	c. Time
2. Regional differences	d. Budget
	e. Product models

P1 reported unstable internet made tablets unusable at times. Older teachers were less confident with technology, and limited training worsened the divide. P1 and P7 highlighted added prep work and reduced teacher collaboration due to time constraints. Furthermore, regional budget disparities resulted in different device types. For instance, some districts provided iPads, while others used Chromebooks, affecting usability. P1 preferred iPads over Chromebooks, citing functionality differences.

These findings suggest that while multimedia supports DI in listening instruction, effective implementation requires not just tools but consistent infrastructure, professional development, and shared understanding among educators.

## 5. Discussion

### 5.1. RQ 1: How do English teachers in Japan conceptualize differentiation in

## **teaching?**

### 5.1.1 Organization and instructional style

This study found that many Japanese junior high school English teachers conceptualize Differentiated Instruction [DI] as individualized support. This understanding appears influenced by MEXT's use of the term 'Kobetsu-saitekika,' which includes the word 'individual' (kobetsu) and may have led teachers to equate DI with one-on-one instruction. The principles of DI, which prioritize flexible learning opportunities and collaborative engagement among diverse learners, contradict this interpretation.

The term 'Kobetsu-saitekika' is not clearly defined in the Courses of Study, while 'personalized instruction'—which implies tailored teaching—does appear there (MEXT, 2017b). This discrepancy may account for why teachers are more familiar with the latter and misinterpret DI. Professional development and curriculum reform are needed to bridge this gap. Teachers should be supported in deepening their pedagogical understanding of DI through formal learning opportunities, rather than informal inference from policy language.

Interestingly, newer teachers in this study showed more openness to DI than their experienced counterparts. This may reflect greater exposure to new educational frameworks or fewer entrenched teaching routines. While some researchers argue that experience leads to better practice, others emphasize that teaching context and institutional support play a more significant role (Douglas et al., 2016; Turner et al., 2017).

### 5.1.2 Students' needs

Teachers often designed instruction aimed at average-level students in their classes, which conflicts with DI's emphasis on adapting instruction to meet varied learning profiles. This tendency may be rooted in Japan's tradition of standardized instruction aimed at fairness and equality (Yamanaka & Suzuki, 2020). However, such an approach can overlook learners' individual needs, particularly in linguistically or culturally diverse classrooms.

Participants in this study described difficulty teaching students who were not fluent in Japanese, especially when the instruction was designed with native speakers in mind. Additionally, many teachers expressed a lack of confidence in their own English ability. MEXT (2019) reported that less than 40% of junior high school English teachers achieved the CEFR B2 level. Limited teacher proficiency may lead to greater reliance on Japanese and hinder students' motivation to improve English (Anggoro & Nguyen, 2021).

## **5.2. RQ 2: How do teachers think using multimedia can facilitate differentiation in listening tasks?**

Teachers in this study indicated that multimedia tools, such as tablets and laptops, support differentiated listening instruction by allowing learners to control playback speed and access subtitles. These functions help learners engage with material at their pace and reduce cognitive overload (Mayer, 2014; Alobaid, 2021). Compared to CD-based listening tasks, multimedia offers students greater autonomy and responsiveness to individual needs (Healey et al., 2011).

Participants also observed that students became more independent and reflective through multimedia, often identifying and addressing their comprehension gaps. While multimedia's visual support was considered beneficial, further research may be needed to explore its long-term effects on listening acquisition. Anderson (2020) suggests that excessive reliance on visuals could potentially bypass key auditory processing stages.

As a means of addressing the aforementioned challenges, the provision of prior knowledge support may be effective. Kizilcec et al. (2017) demonstrated that short video-based visual and auditory materials, designed to offer repeated access to key concepts and difficult-to-understand content, contribute to the development of self-regulated learning. For instance, several resource banks provide free access to instructional materials, including the British Council, NHK Radio Podcasts, and Apple's Learning Center. The British Council offers a wide variety of level-appropriate resources, many of which are accompanied by scripts. These scripts help reduce the cognitive load during listening and facilitate better comprehension. Such resources can be employed flexibly across contexts to support differentiated listening instruction (British Council, n.d.). NHK, on the other hand, provides radio broadcasts updated daily or weekly. Unlike textbooks, these broadcasts deliver different content each time, enabling learners to practice listening with more authentic and practical materials (NHK, n.d.). In addition, the inclusion of Japanese explanations offers the advantage of allowing learners to quickly and accurately understand unfamiliar parts. Apple's Learning Center provides teachers with the ability to customize listening materials to meet learners' needs. In particular, the use of tools such as GarageBand allows learners to record, edit, and present their own content. The creation of such original audio materials has strong potential to directly foster learning practices that align with the principles of DI (Apple, 2025). By providing such materials in formats that are not restricted by time or location, learners are given the opportunity to build foundational understanding of their individual needs. This preparatory scaffolding

can enhance learners' readiness before they engage in subsequent learning processes.

### **5.3. RQ 3: What are the challenges teachers encounter in using multimedia instruction?**

Two main challenges emerged: technical issues and regional budget disparities. Teachers reported difficulty adapting to new technologies, often due to their experience with Blackboard-centered instruction (Zhang, 2016). Problems such as unstable internet connections and lack of confidence in using devices frequently interrupted classes (An & Zhang, 2021). These issues not only affected instructional flow but also limited students' effective use of multimedia tools (Aydin & Erol, 2021).

Regional inequality was another barrier. While some districts provided iPads, others supplied lower-spec Chromebooks, which affected usability and teacher motivation. Using Tokyo's digital education budgets as an example, Shibuya-Ku receives the highest allocation, which comes to approximately 800 million yen. This sum includes not only the provision of student tablets but also the installation of system infrastructure such as fixed projectors with electronic whiteboard functionality (MIC, 2017). In contrast, Koto-Ku's general budget, which amounts to approximately 278.4 billion yen, does not explicitly specify expenditures related to digital education in its budget documents (Koto City, 2024). Therefore, it can be inferred that funding specifically allocated to education through multimedia is relatively limited (Koto City, 2025). The presence or absence of detailed budgetary disclosure thus clearly reflects each municipality's degree of commitment to multimedia integration in education. Without increased investment and systematic teacher training, the full potential of multimedia-supported instruction may remain unrealized.

Due to the absence of a systematic framework for regularly evaluating the impact of multimedia use on learning outcomes, teachers lack clear guidance on how to utilize these tools effectively. As a result, there is a risk that multimedia integration may remain superficial, failing to carry meaningful pedagogical value. In an era where students have increasing access to multimedia resources outside of school, it is now imperative that educators, learners, and policymakers develop a shared understanding of the unique educational purposes and advantages of multimedia use within the school context.

## 6. Conclusion

### 6.1. Implications

The findings of this study present both theoretical and practical implications. Theoretically, the results demonstrate the need to further develop the principles of Differentiated Instruction [DI], which remain largely based on Tomlinson's framework, with limited recent expansion. Misconceptions among teachers in this study suggest that ongoing theoretical work is essential to prevent misinterpretation of DI as mere individualized instruction.

Practically, the study emphasizes three areas: material banks, collaborative learning, and time management. Free listening resources such as the British Council and NHK Radio Podcasts can support level-based instruction aligned with DI. Collaborative learning, as supported by DI principles, may also help teachers better grasp its concept, especially when guided by multimedia-friendly tools like Barkley et al.'s (2014) handbook.

Finally, time constraints due to multimedia use remain a major concern. Short-term solutions include teacher training through resources like Apple's Learning Center. In the long term, a teaching assistant system could distribute tasks and enhance peer collaboration, improving instructional planning and communication.

### 6.2. Limitations and further research

In the present research, limitations in this research design were found. The sample size represents a limitation. Although the study targeted English teachers at public junior high schools, the participants gathered were unevenly distributed across Tokyo, thus limiting the application of the research findings. Therefore, it is difficult to accurately depict research results that encompass English teachers in public junior high schools throughout Japan. Thus, further research could apply convenience sampling to ensure a more comprehensive sample. By applying convenience sampling, it may be possible to ask teachers in areas unrelated to the researcher to cooperate in participation, although it may be time-consuming to recruit participants (Hennink et al., 2020).

Teachers' perceptions of the use of multimedia were also investigated in interviews. However, the actual use of multimedia does not match teachers' answers about its use at the time of the interviews. Studies addressing the use of multimedia in education, such as Ampa (2015) and Islam (2020), have applied methods such as experimentation and observation. Further research could, therefore, observe teachers' use of multimedia to promote DI. In doing so, exploring practical ways to use multimedia in the classroom would be helpful to encourage the DI that MEXT

expects.

Another area that needs improvement is the unstable network environment experienced during online interviews. The participant's Wi-Fi became unstable during the interview, leading to a loss of connection and persistent inactivity. To ensure the smooth implementation of the interviews, the stability of the network environment should be confirmed with the participants in advance. Once the need to deal with Covid-19 has diminished, it would be ideal to consider face-to-face interviews.

While this study acknowledges certain limitations, the integration of multimedia into task design broadens instructional options and has significant potential to raise the baseline of listening proficiency among all learners. Accordingly, it is imperative to establish a clear and consistent conceptualization of Differentiated Instruction among teachers.

### References

- Alobaid, A. (2021). ICT multimedia learning affordances: Role and impact on ESL learners' writing accuracy development. *Heliyon*, *7*(7), 1-15.  
<https://doi.org/10.1016/j.heliyon.2021.e07517>
- Ampa, A. T. (2015). The implementation of interactive multimedia learning materials in teaching listening skills. *English Language Teaching*, *8*(12), 56-62.  
<http://dx.doi.org/10.5539/elt.v8n12p56>
- An, L., & Zhang, G. (2021). Investigation and reflection on multimedia-assisted English classroom teaching. *International Journal of Electrical Engineering & Education*. 1-14. <https://doi.org/10.1177/0020720920983708>
- Anderson, J. R. (2020). *Cognitive psychology and its implications* (9th ed.). Macmillan International Higher Education.
- Anggoro, K. J., & Nguyen, A. N. (2021). Students' perceptions with different CEFR levels on foreign teachers using L1 in EFL instruction. *Studies in English Language and Education*, *8*(3), 1177-1193. <https://doi.org/10.24815/siele.v8i3.19629>
- Apple, Incorporated. (2025). Learning center. *Education Community*.  
<https://education.apple.com/learning-center>
- Aydin, E., & Erol, S. (2021). The views of Turkish language teachers on distance education and digital literacy during COVID-19 pandemic. *International Journal of Education and Literacy Studies*, *9*(1), 60-71.  
<http://dx.doi.org/10.7575/aiac.ijels.v.9n.1p.60>
- Barkley, E. F., Major, C. H., & Cross, K. P. (2014). *Collaborative learning techniques: A handbook for college faculty* (2nd ed.). Jossey-Bass.
- Benesse Educational Research and Development Institute. (2016). *Tyuu kou no eigo shidou ni kannsuru jittai tyousa 2015* [Survey on English teaching in middle and high schools 2015]. <https://berd.benesse.jp/global/research/detail1.php?id=4776>
- Braun, V., & Clarke, V. (2006). Using thematic analysis in psychology. *Qualitative Research in Psychology*, *3*(2), 77-101. <https://doi.org/10.1191/1478088706qp063oa>
- British Council. (n.d.). Listening. *Learning English*.  
<https://learnenglish.britishcouncil.org/skills/listening>
- Byrne, D. (2022). A worked example of Braun and Clarke's approach to reflexive thematic analysis. *Quality & Quantity*, *56*, 1391-1412.  
<https://doi.org/10.1007/s11135-021-01182-y>
- Council of Europe. (2020). *Common European framework of reference for languages: Learning, teaching, assessment*. Council of Europe Publishing. [www.coe.int/lang-cef](http://www.coe.int/lang-cef)
- Dema, D., Klibthong, S., & Srisurakul, T. (2022). Exploring Bhutanese teachers' perceptions of differentiated instruction in inclusive schools in Bhutan. *Australasian Journal of Special and Inclusive Education*, *46*(1), 88-100.  
<https://doi.org/10.1017/jsi.2022.4>
- Douglas, S. N., Chapin, S. E., & Nolan, J. F. (2016). Special education teachers'

- experiences supporting and supervising paraeducators: Implications for special and general education settings. *Teacher Education and Special Education*, 39(1), 60-74. <https://doi.org/10.1177/0888406415616443>
- Eikeland, I., & Ohna, S. E. (2022). Differentiation in education: A configurative review. *Nordic Journal of Studies in Educational Policy*, 8(3), 157-170. <https://doi.org/10.1080/20020317.2022.2039351>
- George, P. S. (2005). A rationale for differentiating instruction in the regular classroom. *Theory Into Practice*, 44(3), 185–193. [https://doi.org/10.1207/s15430421tip4403\\_2](https://doi.org/10.1207/s15430421tip4403_2)
- Healey, D., Hanson-Smith, E., Hubbard, P., Ioannou-Georgiou, S., Kessler, G., & Ware, P. (2011). TESOL technology standards. TESOL International Association.
- Hennink, M., Hutter, I., & Bailey, A. (2020). *Qualitative research methods* (2nd ed.). SAGE Publications Ltd.
- Islam, F. S. P. (2020). The use of multimedia ad its impact on Bangladeshi EFL learners at tertiary level. *International Journal of language Education*, 4(1), 150-157. <https://eric.ed.gov/?id=EJ1249924>
- Ismail, S. A. A., & Al Allaq, K. (2019). The nature of cooperative learning and differentiated instruction practices in English classes. *SAGE Open*, 9(2), 1-17. <https://doi.org/10.1177/2158244019856450>
- Jamoliddinova, N., & Kuchkarova, Y. (2022). Teachers' perception towards differentiated instruction approach in secondary schools of Namangan city. *International Journal of Foreign Language Teaching and Research*, 10(41), 37-47.
- Kizilcec, R. F., Saltarelli, A. J., Reich, J., & Cohen, G. L. (2017). Closing global achievement gaps in MOOCs. *Science (American Association for the Advancement of Science)*, 355(6322), 251-252. [10.1126/science.aag2063](https://doi.org/10.1126/science.aag2063)
- Kótay-Nagy, A. (2023). Differentiated instruction in the EFL classroom: An interview study on Hungarian primary and secondary school EFL teachers' views and self-reported practices. *Journal of Adult Learning, Knowledge and Innovation*, 6(1), 1-14. <https://doi.org/10.1556/2059.2023.00076>
- Koto City. (2024). *Overview of the initial budget (draft) for fiscal year 2025 (Reiwa 7)*. Koto City Tokyo. <https://www.city.koto.lg.jp/011102/7nendotosoyoyosan.html>
- Lavania, M., & Nor, F. M. (2021). Factors influencing the implementation of differentiated instruction in English language instruction in rural and urban secondary schools of Johor Bahru. *Creative Education*, 12(6), 1235-1246. <https://doi.org/10.4236/ce.2021.126093>
- López-Barríos, M., & de Debat, E. V. (2014). Global vs. Local: Does it matter?. In S. Garton, & K. Graves (Eds.), *International perspectives on materials in ELT* (pp. 37-52). Palgrave Macmillan. [https://doi.org/10.1057/9781137023315\\_3](https://doi.org/10.1057/9781137023315_3)
- Mayer, R. E., Lee, H., & Peebles, A. (2014). Multimedia learning in a second language: A cognitive load perspective. *Applied Cognitive Psychology*, 28(5), 653-660. <https://doi.org/10.1002/acp.3050>

- Ministry of Education, Culture, Sports, Science and Technology. (2017a). *Heisei 29 nenndo eigoryoku tyousa kekka (tyuugaku 3 nennsei) no gaiyou* [Summary of English language proficiency survey results in 2017 (3rd year junior high school students)]. [https://www.mext.go.jp/a\\_menu/kokusai/gaikokugo/1403470.htm](https://www.mext.go.jp/a_menu/kokusai/gaikokugo/1403470.htm)
- Ministry of Education, Culture, Sports, Science and Technology. (2017b). *Tyuu gakkou gakushuu sidou youryou (heisei 29 nenn kokuji) kaisetu gaikokuhenn* [Commentary on the Courses of Study of junior high schools (announced in 2017) foreign languages edition].  
[https://www.mext.go.jp/component/a\\_menu/education/micro\\_detail/\\_icsFiles/afiel\\_dfile/2019/03/18/1387018\\_010.pdf](https://www.mext.go.jp/component/a_menu/education/micro_detail/_icsFiles/afiel_dfile/2019/03/18/1387018_010.pdf)
- Ministry of Education, Culture, Sports, Science and Technology. (2019). *Reiwa gannnenndo 'Eigo kyouiku jisshi jyoukyou tyousa' gaiyou* [Summary of the 2019 English education status survey].  
[https://www.mext.go.jp/a\\_menu/kokusai/gaikokugo/1415043.htm](https://www.mext.go.jp/a_menu/kokusai/gaikokugo/1415043.htm)
- Ministry of Education, Culture, Sports, Science and Technology. (2021). *Gakushuu shidouyouryou no shushi no jitugenn ni muketa Kobetsusaiteki na manabi to kyoudouteki na anabi no ittaiteki na jyuujitu ni kannsuru sakknoushiryou* [Summary of the 2019 English education status survey].  
[https://www.mext.go.jp/a\\_menu/kokusai/gaikokugo/1415043.htm](https://www.mext.go.jp/a_menu/kokusai/gaikokugo/1415043.htm)
- Ministry of Internal Affairs and Communications. (2017). *Educational ICT guidebook: Toward the realization of a new learning environment using ICT*. Ministry of Internal Affairs and Communications Japan.  
[https://www.soumu.go.jp/menu\\_news/s-news/01ryutsu05\\_02000097.html](https://www.soumu.go.jp/menu_news/s-news/01ryutsu05_02000097.html)
- Moosa, V., & Shareefa, M. (2019). The impact of teachers' experience and qualification on efficacy, knowledge and implementation of differentiated instruction. *International Journal of Instruction, 12*(2), 587-604.  
<https://doi.org/10.29333/iji.2019.12237a>
- NHK. (n.d.). NHK Podcast. *NHK*. <https://www.nhk.or.jp/podcasts/>
- O'Meara, J. (2010). *Beyond differentiated instruction*. Corwin.
- Ortega, D. P., Cabrera, J. M., & Benalcázar, J. V. (2018). Differentiating instruction in the language learning classroom: Theoretical considerations and practical applications. *Journal of Language Teaching and Research, 9*(6), 1220-1228.  
<http://dx.doi.org/10.17507/jltr.0906.11>
- Reis, S. M., & Renzulli, J. S. (2018). The five dimensions of differentiation. *International Journal for Talent Development and Creativity, 6*(1), 87-94.  
<https://eric.ed.gov/?id=EJ1296874>
- Tamimy, M., Rashidi, N., & Koh, J. H. L. (2023). The use of cooperative learning in English as foreign language classes: The prevalence, fidelity, and challenges. *Teaching and Teacher Education, 121*, 1-13.  
<https://doi.org/10.1016/j.tate.2022.103915>

- Terry, G., Hayfield, N., Clarke, V., & Braun, V. (2017). Thematic analysis. In C. Willig, & W. Stainton Rogers (Eds.), *The SAGE handbook of qualitative research in psychology* (2nd ed., pp. 17-37). SAGE Publications Ltd.
- Tomlinson, C. A., & Allan, S. D. (2000). *Leadership for differentiating schools & classrooms*. Association for Supervision and Curriculum Development.
- Tomlinson, C. A., Imbeau, M. B. (2023). *Leading and managing a differentiated classroom* (2nd ed.). Association for Supervision and Curriculum Development.
- Turner, W. D., Solis, O. J., & Kincade, D. H. (2017). Differentiating instruction for large classes in higher education. *International Journal of Teaching and Learning in Higher Education*, 29(3), 490-500. <https://files.eric.ed.gov/fulltext/EJ1151047.pdf>
- Yamanaka, S., & Suzuki, K. H. (2020). In F. M. Reimers (Ed.), *Audacious education purposes: How governments transform the goals of education system* (pp. 81-103). Springer. <https://doi.org/10.1007/978-3-030-41882-3>
- Zhang, Z. (2016). The use of multimedia in English teaching. *Us-China Foreign Language*, 14(3), 182-189. 10.17265/1539-8080/2016.03.002

## Appendix

Due to its large file size, the appendix is provided via an external link.

Link: **Appendix.docx**