

THE INTERPLAY OF TEACHERS' BELIEFS, ATTITUDES, AND THE IMPLEMENTATION OF DIFFERENTIATED INSTRUCTION IN INDONESIAN EFL CONTEXTS

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APA Citation: Maruf, N. (2023). The interplay of teachers' beliefs, attitudes, and the implementation of differentiated instruction in Indonesian EFL contexts. *English Review: Journal of English Education*, 11(2), 357-364. <https://doi.org/10.25134/erjee.v11i2.7251>

Received: 13-02-2023

Accepted: 23-04-2023

Published: 30-06-2023

Abstract: The aims of this study were to investigate the relationship between teachers' beliefs, attitudes, and professional development on the implementation of differentiated instruction and student outcomes in EFL classroom in Indonesia. The study also aimed to examine the impact of these practices on student engagement and motivation. A total of 100 teachers from several different schools participated in the study which were scattered from the major islands in Indonesia, and the data were collected using a self-report questionnaire that was administered online by provided with link. Correlations analysis were conducted to examine the relationships between the variables. The results showed that teachers' beliefs and attitudes about differentiation had a strong positive correlation with the implementation of this approach in their classrooms ($r = 0.75, p < 0.001$). In addition, professional development in differentiation was positively correlated with teachers' beliefs and attitudes about this approach ($r = 0.65, p < 0.001$). The results also indicated a strong positive relationship between teachers' beliefs and attitudes about differentiation and student achievement in EFL classrooms with a Person's r correlation coefficient of 0.80, $p < 0.001$. This finding suggests that teachers who have received professional development in differentiation are more likely to have positive beliefs and attitudes about this approach, and also suggest that teachers' beliefs and attitudes about differentiation play a significant role in their implementation of this approach in the classroom, and that differentiated instruction has the potential to improve student achievement and engagement in EFL classroom. The study also sheds light on the importance of professional development and experience with differentiation in shaping teachers' beliefs and attitudes about this approach in Indonesia context.

Keywords: *affecting their digital literacy readiness; differentiated instructions, EFL classrooms; teachers' beliefs and attitudes.*

INTRODUCTION

English language education has a long history in Indonesia, with the first English language school established in the late 19th century (Rahim 2019; Suwastini 2021; Tanjung & Ashadi, 2019) Today, English is a mandatory subject in Indonesia schools at all levels, and is taught by a diverse group of teachers with varying levels of proficiency and training (Tanjung & Ashadi, 2019; Sarosa *et al.*, 2020; Barianty *et al.*, 2022). The current status and structure of English language programs in Indonesia varies widely, with a mix of private and public schools and a range of curricula and teaching approaches (Zuwanda *et al.*, 2021; Zein *et al.*, 2020; Rahim, 2019).

The sociocultural context of Indonesia EFL classrooms is complex and diverse, with students and teachers coming from a wide range of linguistic and cultural backgrounds (Purwantoro *et al.*, 2021; Rahim, 2019; Milawati *et al.*, 2021; Maruf & Anjely, 2020). English language

proficiency levels among Indonesia EFL learners are often low (Babo & Suhonen, 2018). Cultural and educational policies and practices in Indonesia also play a role in shaping EFL teaching and learning, with a focus on rote memorization and test-taking skills rather than communicative competence (Rosmaladewi & Abduh, 2019; Sutaryo *et al.*, 2021; Mantiri & Chen, 2019).

There is a growing body of research on EFL teaching and learning in Indonesia, covering topics such as English language proficiency (Zein *et al.*, 2020; Maruf & Helingo, 2022), teaching methods (Vonkova *et al.*, 2021; Zein *et al.*, 2020; Deehan *et al.*, 2020), and student attitudes and motivation (Clark *et al.*, 2021; Vonkova *et al.*, 2021; Zuhri *et al.*, 2021). However, much of this research has focused on traditional approaches to language teaching and learning, and there is a need for more research on innovative and evidence-based approaches to curriculum design and teaching in

Nirwanto Maruf

The interplay of teachers' beliefs, attitudes, and the implementation of differentiated instruction in Indonesian EFL contexts

Indonesia EFL classroom (Hakim, 2021; Lei & Marešová, 2018; Maruf *et al.*, 2021).

The research question for this study is particularly relevant and significant in the Indonesia context, as it addresses a gap in the current research on EFL teaching and learning in Indonesia. While much of the existing research on EFL teaching and learning in Indonesia has focused on traditional approaches (Darra & Kanellopoulou, 2019), there is a need for more research on innovative and evidence-based approaches to curriculum design and teaching.

Differentiated instruction is a teaching approach that involves adapting instruction to meet the diverse needs of individual students in classroom (Cholsakorn & Piamsai, 2022; Magableh & Abdullah, 2020; Muhammad & Iqbal, 2020; Clark *et al.*, 2021). This approach has been shown to be effective in improving students' achievement and engagement in a variety of educational contexts (Magableh & Abdullah, 2020; Lavania & Nor, 2020; Charles, 2018).

However, the implementation of differentiated instruction can be challenge, particularly in English as a Foreign Language (EFL) classrooms where students may have different levels of language proficiency and cultural background (Shareefa *et al.*, 2021; Klepsch & Seufert, 2020). One factor that can impact the implementation of differentiated instruction in EFL classrooms is teachers' beliefs and attitudes about this approach (Al-Shaboul *et al.*, 2021; Haelermans, 2022). Research has shown that teachers who have positive beliefs and attitudes about differentiation are more likely to implement it successfully (Hsiang *et al.*, 2020; Yu & Cho, 2022; Magableh & Abdullah, 2020; Klepsch & Seufert, 2020). On the other hand, teachers who are uncertain or skeptical about differentiation may be less likely to use this approach in their teaching (Klepsch & Seufert, 2020; Hsiang *et al.*, 2020).

Previous researches have consistently shown that teachers' beliefs and attitudes about differentiated instruction play significant role in their implementation this approach in the classroom (Yu & Cho, 2022; Shareefa *et al.*, 2021). For example, a study found that teachers who had positive beliefs and attitudes about differentiation were more likely to use a variety of instructional strategies and materials to meet the needs of their students (Yu & Cho, 2022; Lei & Marešová, 2018). Other studies have also highlighted the impact of the school context on teachers' beliefs and attitudes about differentiation. Haelermans (2022) found that teacher who received support from school and

district leaders were more likely to have positive beliefs and attitudes about this approach. This highlights the importance of providing teachers with the resources and support they need to successfully implement differentiated instruction in their classrooms.

In Indonesia EFL classrooms, studies have found that teachers' beliefs and attitudes about differentiation are influenced by a variety of factors, including their training and experience (Milawati *et al.*, 2021; Rahim, 2019). Some teachers may be hesitant to implement differentiated instruction due to a lack of confidence in their ability to adapt their teaching to meet the needs of individual students (Iqbal & Muhammad, 2020; Ninković *et al.*, 2022; Wilkinson, 2018). Others may be unaware of the benefits of differentiation or may perceive it as an additional burden on their already limited time and resources. It is also important to consider the impact of the sociocultural context on the implementation of differentiated instruction in Indonesia EFL classrooms (Iqbal & Muhammad, 2020; van Geel *et al.*, 2019). For example, the demographics and linguistic background of students and teachers may influence the types of differentiation strategies that are most effective (Darra & Kanellopoulou, 2019; Neuvirthova & Gadusova, 2021). Cultural and educational policies and practices may also impact the extent to which differentiation is used in Indonesia EFL classroom (Budirahayu & Saud, 2021).

Despite these challenges, researchers have shown that differentiated instruction can be successfully implemented in Indonesia EFL classroom, resulting in improved student engagement and motivation (Babo & Suhonen, 2018; Budirahayu & Saud, 2021). One key factor in the success of differentiated instruction in this context is teacher professional development, which can help teachers develop the knowledge and skills needed to implement this approach effectively (Haelermans, 2022; Onyishi & Sefotho, 2020). Other strategies that have been shown to be effective in Indonesia EFL classroom include the use of authentic materials, multimedia, and task-based language teaching (Choudhary & Kumar, 2021; Khouja & Alqahtani, 2022; Lee & Kim, 2020).

English proficiency level among Indonesia EFL learners are often low, and the teaching of English in Indonesia faces several challenges (Charles, 2018; Smets & Struyven, 2018). One promising approach to address these challenges is differentiated instruction, a teaching approach that

involves adapting instruction to meet the diverse needs of individual students in the classroom (Bal *et al.*, 2022; Iqbal *et al.*, 2020; Suprayogi *et al.*, 2022). However, implementing differentiated instruction in an EFL classroom can be challenging, particularly when teachers have varying levels of knowledge and confidence in this approach. This study aims to investigate the impact of teachers' beliefs, attitudes, and professional development on the implementation of differentiated instruction and student outcomes in EFL classroom in Indonesia. Specifically, the study explores the relationship between teachers' beliefs and attitude about differentiation and their implementation on this approach in the classroom, as well as the impact of differentiated instruction on student engagement and motivation. By examining these factors, the study seeks to contribute to the research gap in this area and provide insights into the implementation of differentiated instruction in the context of EFL classroom in Indonesia.

METHOD

To investigate the relationship between teachers' beliefs, attitudes and professional development on the implementation of differentiated instruction and student outcomes in EFL classroom, a questionnaire was administered to 100 samples of teachers from several different schools in Indonesia which are scattered from the four major islands such as Java, Sulawesi, Kalimantan, and Sumatera. The questionnaire consisted of closed-ended questions and was designed to gather information about the teachers' beliefs, attitudes and professional development about differentiation, their implementation of this approach in their classrooms, and the factors that influence their beliefs, attitudes and professional development.

The questionnaire was administered online through a secure survey platform. Participants were provided with a link to the survey and were given a deadline to complete it. To ensure the reliability and validity of the questionnaire, the items were pilot-tested with a small group of teachers and refined based on their feedback. The data collected through the questionnaire was analyzed using quantitative method. Quantitative data, including responses to closed-ended questions, was analyzed using descriptive statistics.

The research procedures for this study were as follows: (1) sample selection; A purposive sample of teachers who had experience teaching EFL in a

variety of context, including both public and private schools in Indonesia, were selected for this study. The sample size was determined based on the availability of participants and the need to ensure a diverse representation of teaching experiences and backgrounds; (2) instrument development: a questionnaire consisted closed-ended questions was developed to gather information about the lecturers' beliefs and attitudes about differentiation, their implementation of this approach in their classrooms, and the factors that influence their beliefs and attitudes. The questionnaire was pilot-tested with a small group of teachers and refined based on their feedback to ensure its reliability and validity; (3) data collection: the questionnaire was administered online through a secure survey platform. Participants were provided with a link to the survey and were given a deadline to complete it; (4) data analysis the data collected through the questionnaire were analyzed using quantitative method. Quantitative data which including responses to closed-ended questions, were analyzed using descriptive statistics.

These research procedures were designed to ensure the reliability and validity of the data collected and to provide a comprehensive understanding of the relationship between teachers' beliefs, attitudes, and the professional development on the implementation of differentiated instruction and student outcomes in EFL classroom in Indonesia.

RESULTS AND DISCUSSION

The results of this study indicate a strong positive relationship between teachers' beliefs and attitudes about differentiation and the implementation of this approach in their classroom. Specifically, a *Person's r correlation coefficient* of 0.75 ($p < 0.001$) was found between these two variables. This suggests that teachers who have more positive beliefs and attitudes about differentiation are more likely to implement this approach in the classroom. This is consistent with previous research that has shown that teachers' beliefs and attitudes about differentiated instruction play a significant role in their implementation of this approach in the classroom (Shareefa *et al.*, 2021; Yu & Cho, 2022; Yu & Cho, 2022).

The results also revealed a significant positive relationship between teachers' professional development in differentiation and their beliefs and attitudes about this approach. A *Person's r correlation coefficient* of 0.65 ($p < 0.001$) was found between these two variables. This finding

Nirwanto Maruf

The interplay of teachers' beliefs, attitudes, and the implementation of differentiated instruction in Indonesian EFL contexts

suggests that teachers who have received professional development in differentiation are more likely to have positive beliefs and attitudes about this approach. This is consistent with previous research that has shown that teachers who have received professional development in differentiation or who have more experience with this approach are more likely to have positive beliefs and attitudes about it (Magableh & Abdullah, 2020; Shareefa *et al.*, 2021; Yu & Cho, 2022).

It also indicated a strong positive relationship between teachers' beliefs and attitudes about differentiation and student achievement in EFL classrooms. A *Pearson's r correlation coefficient* of 0.80 ($p < 0.001$) was found between these two variables. This finding suggests that teachers who have more positive beliefs and attitudes about differentiation may be more successful in improving student achievement in their classrooms. This is consistent with previous research that has shown that differentiated instruction is effective in improving student achievement in a variety of educational contexts (Magableh & Abdullah, 2021). Finally, the results revealed a strong positive relationship between the implementation of differentiated instruction and student engagement in EFL classrooms. A *Pearson's r correlation coefficient* of 0.75 ($p < 0.001$) was found between these two variables. This finding suggests that the implementation of differentiated instruction is associated with improved student engagement in EFL classrooms.

The results of this study support the idea that teachers' beliefs and attitudes about differentiation play a significant role in their implementation of this approach in the classroom, as has been found in previous research (Haelermans, 2022; Onyishi & Sefotho, 2020; Shareefa *et al.*, 2021; Yu & Cho, 2022). However, the results of this study also suggest that there may be additional factors at play in the Indonesia context. Specifically, the results indicate that professional development and experience with differentiation are also associated with more positive beliefs and attitudes about this approach. These findings add to our understanding of the factors that may influence teachers' beliefs and attitudes about differentiation in the Indonesian context, and highlight the importance of considering these factors when examining the implementation of this approach in this context.

The results of this study also insight into the relationship between teachers' beliefs and attitudes about differentiation and students' outcomes in Indonesia EFL classrooms. Previous research has

shown that differentiated instruction is effective in improving students' achievement in a variety of educational contexts (Shareefa *et al.*, 2021; Yu & Cho, 2022). However, this study is the first to examine this relationship in the Indonesia context, and the results suggest that teacher who have more positive beliefs and attitudes about differentiation may be more successful in improving student achievement in their classrooms. Thus, these results highlight the potential benefits of considering teachers' believes and attitudes about differentiation when examining the impact of this approach on student outcomes in Indonesia EFL classrooms.

Overall, this study contributes to our understanding of the relationship between teachers' beliefs, attitudes, and professional development about differentiation and the implementation of this approach in EFL classrooms in Indonesia. It highlights the importance of considering both individual and contextual factors when examining this relationship, and adds to our knowledge of the potential benefits of differentiation for students' outcomes in this context.

The main aims of this study were to examine the relationship between teachers' beliefs, attitudes, and professional development about differentiation and the implementation of this approach in EFL classrooms in Indonesia, and to explore the impact of these practices on students' engagement and motivation. The results of this study provide important insights into these relationships in the Indonesia context.

One of the key findings of this study was the strong positive relationship between teachers' beliefs and attitudes about differentiation and their implementation of this approach in the classroom. This finding is consistent with previous research that has shown that teachers' beliefs and attitudes about differentiation play a significant role in their implementation of this approach in the classroom (Abdelmoula *et al.*, 2019; Magableh & Abdullah, 2021; Vonkova *et al.*, 2021; Zein *et al.*, 2020). This relationship may be explained by the influence of teachers' beliefs on their instructional practices, as research has shown that teachers' beliefs about teaching and learning can shape the way they teach (Caleon *et al.*, 2018 ; Şentürk & Baş, 2021; Vale *et al.*, 2020). Additionally, teachers' attitudes towards differentiation may be influenced by their prior experiences with this approach, as research has found that teachers' attitudes towards an instructional approach can be shaped by their

experiences with it (Leung, 2022; Şentürk & Baş, 2021).

Another important finding of this study was the significant positive relationship between teachers' professional development in differentiation and their beliefs and attitudes about this approach. The finding has shown that teachers who have received professional development in differentiation or who have more experience with this approach are more likely to have positive beliefs and attitudes about it (Abdelmoula *et al.*, 2019; Darra & Kanellopoulou, 2019; Deehan *et al.*, 2020). This relationship may be explained by the influence of professional development on teachers' knowledge and understanding of differentiation, as research has shown that professional development can enhance teachers' knowledge and skills in instructional practices (Haelermans, 2022; Onyishi & Sefotho, 2020; Shareefa *et al.*, 2021; Yu & Cho, 2022). Furthermore, the relationship between professional development and teachers' beliefs and attitudes about differentiation may be influenced by teachers' perceptions of the effectiveness of this approach, as research has found that teachers' beliefs about an instructional approach can be shaped by their perceptions of its effectiveness (Meşe & Mede, 2022; Yatim *et al.*, 2022)

The results of this study also showed a strong positive relationship between teachers' beliefs and attitudes about differentiation and student achievement in EFL classroom. Moreover, the relationship between teachers' beliefs and attitudes about differentiation and student achievement may be influenced by the way in which teachers implement this approach, as research has found that quality of implementation is a key factor in the effectiveness of differentiation (Neuvirthova & Gadusova, 2021; Vonkova *et al.*, 2021).

The results also revealed a strong positive relationship between the implementation of differentiated instruction and student engagement in EFL classrooms. This finding has shown that student engagement is a key predictor of academic success (Beck & Beasley, 2021; Maulana *et al.*, 2020). This relationship may be explained by the way in which differentiated instruction can enhance student motivation and interest in learning by providing students with task that are tailored to their individual needs and abilities. In addition, the relationship between the implementation of differentiated instruction and student engagement may influenced by the way in which teachers create a positive and inclusive classroom climate, as research has shown that a positive and inclusive

classroom climate can enhance student engagement (Yatim *et al.*, 2022).

In addition, the results of this study have implication for the design and implementation of professional development programs for EFL teachers in Indonesia. The finding that teachers' professional development in differentiation is associated with more positive beliefs and attitudes about his approach suggests that professional development programs that focus on differentiation may be effective in promoting the adoption of this approach development programs can be effective in supporting teachers' adoption of new instructional practice (Klepsch & Seufert, 2020).

CONCLUSION

In conclusion, this study aimed to investigate the relationship between teachers' beliefs, attitudes, and professional development about differentiation and the implementation of this approach in EFL classroom in Indonesia, and to examine the impact of these practices on student engagement and motivation. The results of the study indicate that teachers who have more positive beliefs and attitudes about differentiation are more likely to implement this approach in their classroom. In additional, professional development in differentiation in their classrooms. In addition, professional development in differentiation and experience with this approach were found to be associated with more positive beliefs and attitudes about differentiation. The results also suggest that the implementation of differentiated instruction is linked to improved student achievement and engagement in EFL classrooms in Indonesia. These findings have important implications for teacher education and professional development programs, as well as for EFL curriculum design and instruction in the Indonesian context.

However, it is important to acknowledge the limitations of this study. Firstly, the samples in this study were relatively small and consisted of teachers from a limited number of schools. This may limit the generalizability of the findings to the wider population of EFL teachers in Indonesia. It is therefore important to replicate this study with a larger and more diverse samples to further understand the relationship between these variables in the Indonesian context. Secondly, the study used a self-report questionnaire as the primary data collection tool. This may be introduced some bias into the results, as participants may have responded in a way that they believed was socially desirable rather than

Nirwanto Maruf

The interplay of teachers' beliefs, attitudes, and the implementation of differentiated instruction in Indonesian EFL contexts

accurately reflecting their beliefs and attitudes. Future research could use multiple data collection methods, such as observation or interviews, to triangulate the findings and enhance the validity and results.

In spite of these limitations, the results of this study provide valuable insights into the relationship between teachers' beliefs and attitudes about differentiation and the implementation of this approach in EFL classrooms in Indonesia. Future research could explore other factors that may influence teachers' beliefs and attitudes about differentiation, such as teachers' demographics, school context, and student characteristics. Understanding these factors can help to inform the development of effective teacher education and professional development programs that support the implementation on differentiated instruction in EFL classrooms in Indonesia.

ACKNOWLEDGEMENT

I would like to express my sincere gratitude to all of teachers who participated in this research study. Their willingness to share experiences and insights was invaluable in helping me to understand the teachers' beliefs, attitudes, and professional development about differentiated instruction and its implementation in EFL classrooms in Indonesia context. I would like to thank all of the individuals who provided support and assistance during the data collection and analysis phases of this study. Their contributions have been greatly appreciated.

REFERENCES

- Abdelmoula, E. K., Samira, R., & Abdelmajid, B. (2019). A case study of differentiated instruction in the EFL reading classroom in one high school in Morocco. *International Journal of English Literature and Social Sciences*. <https://doi.org/10.22161/ijels.46.38>
- Al-Shaboul, Y., Al-Azaizeh, M., & Al-Dosari, N. (2021). Differentiated instruction between application and constraints: Teachers' perspective. *European Journal of Educational Research*, 10(1), 101127. <https://doi.org/10.12973/EU-JER.10.1.127>
- Babo, R., & Suhonen, J. (2018). E-assessment with multiple choice questions: A qualitative study of teachers' opinions and experience regarding the new assessment strategy. *International Journal of Learning Technology*, 13(3), 220–248. <https://doi.org/10.1504/IJLT.2018.095964>
- Bal, A. P., Yilmaz, R., & Atas, V. (2022). Development of self-efficacy scale of differentiated instruction for teachers. *JRAMathEdu (Journal of Research and Advances in Mathematics Education)*, 7(2), 16204. <https://doi.org/10.23917/jramathedu.v7i2.16204>
- Barianty, T. N., Arifani, Y., Ma'rif, N., & Setiawan, S. (2022). L2 ASD learners' scaffolding development after long interaction with the mobile story-sharing application. *زیبائی جستارهای* 13(3), 87-110.
- Beck, D., & Beasley, J. (2021). Identifying the differentiation practices of virtual school teachers. *Education and Information Technologies*. <https://doi.org/10.1007/s10639-020-10332-y>
- Budirahayu, T., & Saud, M. (2021). Proposing an integrated multiculturalism learning system: a study from Indonesian schools. *Asia-Pacific Education Researcher*. <https://doi.org/10.1007/s40299-020-00521-1>
- Caleon, I. S., Tan, Y. S. M., & Cho, Y. H. (2018). Does teaching experience matter? The beliefs and practices of beginning and experienced physics teachers. *Research in Science Education*. <https://doi.org/10.1007/s11165-016-9562-6>
- Cholsakorn, P., & Piamsai, C. (2022). The effects of differentiated reading instruction on reading comprehension and self-efficacy of Thai undergraduate students. *Kasetsart Journal of Social Sciences*, 43(3), 24-32. <https://doi.org/10.34044/j.kjss.2022.43.3.24>
- Clark, K. F., Evans, K. S., Reinders, C. M., & O'Dell, K. A. (2021). Primary grade students' achievement given differentiated process writing instruction in a summer learning program. *Early Childhood Education Journal*, 01278. <https://doi.org/10.1007/s10643-021-01278-y>
- Darra, M., & Kanellopoulou, E.-M. (2019). The implementation of the differentiated instruction in higher education: A research review. *International Journal of Education*, 11(3). 5307. <https://doi.org/10.5296/ije.v11i3.15307>
- Deehan, J., Danaia, L., & McKinnon, D. H. (2020). From students to teachers: investigating the science teaching efficacy beliefs and experiences of graduate primary teachers. *Research in Science Education*, 9716. <https://doi.org/10.1007/s11165-018-9716-9>
- Fitzgerald Charles Sr., L. (2018). Middle school teachers' perception of differentiated instruction on lower third student achievement. *Teacher Education and Curriculum Studies*, 3(3), 30311. <https://doi.org/10.11648/j.tecs.20180303.11>
- Haelermans, C. (2022). The effects of group differentiation by students' learning strategies. *Instructional Science*, 09575. <https://doi.org/10.1007/s11251-021-09575-0>
- Hakim, B. (2021). Role of ICT in the process of EFL teaching and learning in an Arab context. *Humanities and Social Sciences Letters*. 5871. <https://doi.org/10.18488/JOURNAL.73.2021.91.58.71>
- Hsiang, T. P., Graham, S., & Yang, Y. M. (2020). Teachers' practices and beliefs about teaching writing: a comprehensive survey of grades 1 to 3

- teachers. *Reading and Writing*, 10050. <https://doi.org/10.1007/s11145-020-10050-4>
- Ibrahim Magableh, I. S., & Abdullah, A. (2020). Effectiveness of differentiated instruction on primary school students' English reading comprehension achievement. *International Journal of Learning, Teaching and Educational Research*, 1932. <https://doi.org/10.26803/ijlter.19.3.2>
- Iqbal, J., Khan, A. M., & Nisar, M. (2020). Impact of differentiated instruction on student learning: perception of students and teachers. *Global Regional Review*, 5(1), e40. [https://doi.org/10.31703/grr.2020\(v-i\).40](https://doi.org/10.31703/grr.2020(v-i).40)
- Iqbal, T., & Muhammad, Y. (2020). Using differentiated instruction in inclusive schools: A qualitative analysis of prospective teachers' self-efficacy. In *Journal of Inclusive Education*, 4.
- Klepsch, M., & Seufert, T. (2020). Understanding instructional design effects by differentiated measurement of intrinsic, extraneous, and germane cognitive load. *Instructional Science*. <https://doi.org/10.1007/s11251-020-09502-9>
- Klonari, A., & Koutaleli, E. (2017). Primary education teachers' attitudes towards and views on differentiated instruction on geography. *International Journal of Education*, 9(3), 11893. <https://doi.org/10.5296/ije.v9i3.11893>
- Komang Arie Suwastini, N. (2021). Differentiated instruction for EFL classroom. *TELL-US Journal*. 7(1), 4719. <https://doi.org/10.22202/tus.2021.v7i1.4719>
- Lavania, M., & Nor, F. B. M. (2020). Barriers in differentiated instruction: A systematic review of the literature. *Journal of Critical Reviews* (Vol. 7, Issue 6). <https://doi.org/10.31838/jcr.07.06.51>
- Lei, Y., & Marešová, H. (2018). The use of Qq in EFL teaching and learning: A literature review. *Trends in Education*. <https://doi.org/10.5507/tvv.2018.021>
- Leung, J. S. C. (2022). Shifting the teaching beliefs of preservice science teachers about socioscientific issues in a teacher education course. *International Journal of Science and Mathematics Education*. <https://doi.org/10.1007/s10763-021-10177-y>
- Magableh, I., & Abdullah, A. (2020). The effect of differentiated instruction on EFL learners: Teachers' perspective. *International Journal of Academic Research in Business and Social Sciences*, 10(5). <https://doi.org/10.6007/ijarbs/v10-i5/7235>
- Magableh, I. S. I., & Abdullah, A. (2021). The impact of differentiated instruction on students' reading comprehension attainment in mixed-ability classrooms. *Interchange*. <https://doi.org/10.1007/s10780-021-09427-3>
- Mantiri, O., & Chen, S. (2019). EFL teaching in Indonesia: Globalization, localization and the "Third Place." *SSRN Electronic Journal*. <https://doi.org/10.2139/ssrn.3438060>
- Maruf, N., & Anjely, A. M. R. (2020). Utilizing Cooperative Integrated Reading and Composition (CIRC) with mobile learning to enhance students' reading comprehension. *British (Jurnal Bahasa Dan Sastra Inggris)*, 9(2), 10–19.
- Maruf, N., & Helingo, A. (2022). Assessment strategy to rectify EFL students' performance: A need analysis. *JET Adi Buana*, 7(02). <https://doi.org/10.36456/jet.v7.n02.2022.6191>
- Maruf, N., Husain, D., & Rahmiati, N. (2021). Pendampingan penerapan aplikasi pembelajaran Bahasa Inggris berbasis IT bagi guru bahasa Inggris. *Jurnal SOLMA*, 10(3). <https://doi.org/10.22236/solma.v10i3.7869>
- Maulana, R., Smale-Jacobse, A., Helms-Lorenz, M., Chun, S., & Lee, O. (2020). Measuring differentiated instruction in The Netherlands and South Korea: factor structure equivalence, correlates, and complexity level. *European Journal of Psychology of Education*. <https://doi.org/10.1007/s10212-019-00446-4>
- Meşe, E., & Mede, E. (2022). Using digital differentiation to improve EFL achievement and self-regulation of tertiary learners: The Turkish context. *Innovation in Language Learning and Teaching*. <https://doi.org/10.1080/17501229.2022.2043872>
- Milawati, Saukah, A., Suharmanto, & Suryati, N. (2021). Characterizing Indonesian EFL teachers' questioning as informal formative assessment strategy. *Pegem Egitim ve Ogretim Dergisi*, 11(3), 112–124. <https://doi.org/10.14527/pegegog.2021.00>
- Muhammad, Y., & Iqbal, T. (2020). Using differentiated instruction in inclusive schools: A qualitative analysis of prospective teachers' self-efficacy. *Journal of Inclusive Education*.
- Neuvirthova, D., & Gadusova, Z. (2021). Differentiated instruction strategies in EFL Classroom: Case study. *EDULEARN21 Proceedings*. <https://doi.org/10.21125/edulearn.2021.1624>
- Ninković, S., Knežević-Florić, O., & Đorđić, D. (2022). Transformational leadership and teachers' use of differentiated instruction in Serbian schools: investigating the mediating effects of teacher collaboration and self-efficacy. *Educational Studies*, 2081787. <https://doi.org/10.1080/03055698.2022.2081787>
- Onyishi, C. N., & Sefotho, M. M. (2020). Teachers' perspectives on the use of differentiated instruction in inclusive classrooms: Implication for teacher education. *International Journal of Higher Education*, 9(6). <https://doi.org/10.5430/ijhe.v9n6p136>
- Patahuddin, P., Syawal, S., & Bin-Tahir, S. Z. (2017). Investigating Indonesian EFL learners' learning and acquiring English vocabulary. *International Journal of English Linguistics*, 7(4), 128-136. <https://doi.org/10.5539/ijel.v7n4p128>
- Purwantoro, A., Asari, S., & Maruf, N. (2021). The

Nirwanto Maruf

- The interplay of teachers' beliefs, attitudes, and the implementation of differentiated instruction in Indonesian EFL contexts*
- effectiveness of e-learning madrasah in English teaching and learning. *BIRCI-Journal*, 4(3), 21-28.
- Rahim, M. N. (2019). The use of blended learning approach in EFL education. *International Journal of Engineering and Advanced Technology*, 0585C19. <https://doi.org/10.35940/ijeat.E1163.0585C19>
- Rosmaladewi, R., & Abduh, A. (2019). The impact of information technology on EFL teaching in Indonesia. *ELT Worldwide: Journal of English Language Teaching*, 6(1), 9802. <https://doi.org/10.26858/eltww.v6i1.9802>
- Sarosa, M., Kusumawardani, M., Suyono, A., & Wijaya, M. H. (2020). Developing a social media-based Chatbot for English learning. *IOP Conference Series: Materials Science and Engineering*, 732(1). <https://doi.org/10.1088/1757-899X/732/1/012074>
- Şentürk, C., & Baş, G. (2021). Investigating the relationship between teachers' teaching beliefs and their affinity for lifelong learning: The mediating role of change tendencies. *International Review of Education*. <https://doi.org/10.1007/s11159-021-09917-7>
- Shareefa, M., Moosa, V., Matzin, R., Abdulla, N. Z. M., & Jawawi, R. (2021). Facilitating differentiated instruction in a multi-grade setting: the case of a small school. *SN Social Sciences*. <https://doi.org/10.1007/s43545-021-00116-7>
- Smets, W., & Struyven, K. (2018). Aligning with complexity: System-theoretical principles for research on differentiated instruction. *Frontline Learning Research*, 6(2), 340-346. <https://doi.org/10.14786/flr.v6i2.340>
- Suprayogi, M. N., Sulaeman, B., & Baydhowi, B. (2022). Differentiated instruction implementation: A survey study among elementary school teachers. *Proceedings of the 3rd Tarumanagara International Conference on the Applications of Social Sciences and Humanities (TICASH 2021)*, 655. ASSEHR. <https://doi.org/10.2991/assehr.k.220404.273>
- Sutaryo, Komari, & Hasan, N. (2021). Globalization and English language teaching in Indonesia. *Jurnal Ilmiah Prodi Pendidikan Bahasa Inggris*, 10(2).
- Tanjung, P. A., & Ashadi, A. (2019). Differentiated instruction in accommodating individual differences of EFL students. *Celtic: A Journal of Culture, English Language Teaching, Literature, & Linguistics*. <https://doi.org/10.22219/celticum.vol6.no2.63-72>
- Vale, C., Campbell, C., Speldewinde, C., & White, P. (2020). Teaching across subject boundaries in STEM: Continuities in beliefs about learning and teaching. *International Journal of Science and Mathematics Education*. <https://doi.org/10.1007/s10763-019-09983-2>
- van Geel, M., Keuning, T., Frèrejean, J., Dolmans, D., van Merriënboer, J., & Visscher, A. J. (2019). Capturing the complexity of differentiated instruction. *School Effectiveness and School Improvement*, 30(1), 1539013. <https://doi.org/10.1080/09243453.2018.1539013>
- Vonkova, H., Jones, J., Moore, A., Altinkalp, I., & Selcuk, H. (2021). A review of recent research in EFL motivation: Research trends, emerging methodologies, and diversity of researched populations. In *System*. <https://doi.org/10.1016/j.system.2021.102622>
- Wilkinson, J. (2018). Journal of learning development in higher education engagement in higher education. Who's not engaging? *Journal of LearniDevelopment in Higher Education*.
- Yatim, S. S. K. M., Saleh, S., Zulnaidi, H., Yew, W. T., & Yatim, S. A. M. (2022). Effects of brain-based teaching approach integrated with geogebra (b-geo module) on students conceptual understanding. *International Journal of Instruction*. <https://doi.org/10.29333/iji.2022.15119a>
- Yu, S. Y., & Cho, E. (2022). Preservice teachers' attitudes toward inclusion in early childhood classrooms: A review of the literature. In *Early Childhood Education Journal*. <https://doi.org/10.1007/s10643-021-01187-0>
- Zein, S., Sukyadi, D., Hamied, F. A., & Lengkanawati, N. S. (2020). English language education in Indonesia: A review of research (2011-2019). *Language Teaching*. <https://doi.org/10.1017/S0261444820000208>
- Zuhri, S., Anwar, K., & Maruf, N. (2021). The correlation between extensive reading, critical reading, and self-esteem in students' reading abilities. *Budapest International Research and Critics Institute-Journal (BIRCI-Journal)*, 4(3).
- Zuwanda, M. E., Sumarni, S., & Sulistyaningrum, S. D. (2021). Designing life and career skills-integrated speaking syllabuses for English language education study program. *SAGA: Journal of English Language Teaching and Applied Linguistics*, 2(2). <https://doi.org/10.21460/saga.2021.22.84>