



The Influence of Differentiated Instruction Towards Students Motivation in Learning English at Junior High school

Mutiara Patilima¹, Magvirah El Walidayni Kau², Haris Danial³

^{1,2,3}Universitas Negeri Gorontalo

Article Info	Abstract
Received: 2026-05-31 Revised: 2026-05-31 Accepted: 2026-06-29 Keywords: Differentiated Instruction, EFL Motivation, Student-Centered Learning, Merdeka Curriculum DOI: 10.24256/ideas.v14i1.10087 Corresponding Author: Mutiara Patilima mutiarapatilima50@gmail.com Universitas Negeri Gorontalo	<i>This study aims to examine the influence of Differentiated Instruction (DI) on students' motivation in learning English at SMPN 10 Satu Atap Wonosari. This research employed a quantitative survey design involving 39 students from Grade 8 and Grade 9. Data were collected through Likert-scale questionnaires and analyzed using descriptive statistics and simple linear regression analysis. The findings revealed that the implementation of Differentiated Instruction was categorized as high across content, process, and product differentiation, with process differentiation emerging as the most dominant aspect, reflecting students' positive responses toward adaptive instructional practices. Students' motivation was also categorized as high, particularly in intrinsic motivation. Furthermore, the regression analysis indicated that Differentiated Instruction had a positive and significant influence on students' motivation in learning English, $t(37) = 3.47$, $p = .001$. These findings suggest that Differentiated Instruction supports student-centered EFL learning by promoting students' motivation through adaptive and varied instructional practices.</i>

1. Introduction

This study investigates the influence of Differentiated Instruction (DI) on students' motivation in learning English in an EFL context. Student motivation is a fundamental factor in second language acquisition, as it determines learners' persistence, engagement, and willingness to participate in classroom activities. However, many EFL classrooms still face challenges related to low student

engagement and passive learning behavior, which negatively affect learning outcomes.

From a theoretical perspective, motivation can be explained through Self-Determination Theory (Deci & Ryan, 1985), which emphasizes that learners' motivation is influenced by three basic psychological needs: autonomy, competence, and relatedness. When these needs are supported, students are more likely to develop intrinsic motivation and sustain their learning engagement. This theory aligns with the concept of learner autonomy, which highlights the importance of students taking responsibility for their own learning process, and student-centered learning, where learners actively construct knowledge rather than passively receive information.

In this regard, Differentiated Instruction (Tomlinson, 2001) is considered a student-centered teaching approach that supports learner diversity by adapting content, process, and product based on students' readiness, interests, and learning profiles. This flexibility allows students to learn in ways that match their individual needs, thereby fostering autonomy and motivation. Consequently, DI is theoretically aligned with Self-Determination Theory, as it provides opportunities for autonomy-supportive learning environments.

Previous studies have reported that Differentiated Instruction positively influences students' motivation and engagement in EFL classrooms (Massaad & Chaker, 2020; Sapan & Mede, 2022; Saputri et al., 2023). However, findings across studies are not entirely consistent. For instance, Saputri et al. (2023) found a positive relationship between DI and engagement, but motivation outcomes were less significant compared to other variables. Meanwhile, Sapan & Mede (2022) reported significant improvements in motivation and autonomy, suggesting that contextual factors such as learning environment and implementation quality may influence outcomes. These differences indicate that the effectiveness of DI is not uniform across all educational contexts.

Despite these findings, most previous studies were conducted in higher education or urban school settings, and few have focused on rural junior high school EFL classrooms, particularly in the early stage of Merdeka Curriculum implementation in Indonesia. In addition, limited research has explored DI from the perspective of Self-Determination Theory, especially in relation to learner autonomy and motivation in face-to-face classroom environments.

At the local level, SMPN 10 Satu Atap Wonosari still experiences challenges in English learning. Classroom observations indicate low student participation and limited engagement in learning activities. This condition is also reflected in students' English achievement, where only 48% of students reached the Minimum Competency Criteria (KKM), with an average score of 67.14. Theoretically, such conditions suggest that students' basic psychological needs for autonomy and engagement are not yet fully supported in the learning process.

Therefore, Differentiated Instruction is relevant as it provides adaptive and student-centered learning experiences that may enhance motivation.

Based on this background, this study aims to examine the influence of Differentiated Instruction on students' motivation in learning English at SMPN 10 Satu Atap Wonosari. The research hypothesis is formulated as follows:

H1: There is a significant positive influence of Differentiated Instruction on students' motivation in learning English.

H0: There is no significant influence of Differentiated Instruction on students' motivation in learning English.

2. Method

Research Design

This study employed a quantitative descriptive approach using a survey design. Survey research is used to collect data regarding individuals' beliefs, opinions, characteristics, and behaviors through structured inquiries (Sugiyono, 2023). The primary objective of this study was to examine the influence of Differentiated Instruction (DI) as the independent variable (X) on students' motivation in learning English as the dependent variable (Y). This design allowed the researcher to measure the relationship between variables objectively through statistical analysis.

Participants

The research was conducted at SMPN 10 Satu Atap Wonosari. The population consisted of 75 students (Arikunto, 2013, as cited in Annisa, 2024). A purposive sampling technique was employed to select participants based on specific criteria (Sugiyono, 2023). The final sample consisted of 39 students from Grade 8 and Grade 9. These students were specifically selected because they had experienced the implementation of Differentiated Instruction in English classes. Meanwhile, other classes had not fully implemented DI strategies; therefore, they were not included in the study. This sampling technique was considered appropriate to ensure that the participants had relevant learning experiences related to the research objectives.

Instruments

Data were collected using two instruments: a Differentiated Instruction questionnaire and a Learning Motivation questionnaire. The DI questionnaire was adapted from Whipple (2012) and Tomlinson (2001), covering content, process, and product differentiation. Meanwhile, the motivation questionnaire was adapted from Amin (2023) based on Brown's (2007) theory of motivation, which includes intrinsic and extrinsic motivation, interest, and persistence. Both instruments used

a five-point Likert scale ranging from Strongly Disagree (1) to Strongly Agree (5). To ensure the quality of the instruments, validity and reliability tests were conducted.

Data Collection

The data were collected by distributing questionnaires to the selected participants. Students were asked to respond to each statement based on their experiences during English learning activities involving Differentiated Instruction. Before completing the questionnaires, the participants were informed about the objectives of the study, and their participation was voluntary. The confidentiality of participants' identities and responses was also maintained, and the collected data were used solely for research purposes. The completed questionnaires were then compiled and prepared for statistical analysis.

Data Analysis

The data analysis process was conducted using statistical software. Descriptive statistics were used to describe the characteristics of the data, including mean scores, standard deviation, and frequency distribution (Sugiyono, 2023; Annisa, 2024). Mean scores were interpreted using five categories based on an interval range of 0.80 adapted from Sudjana's formula (2016, as cited in Igrisa, 2025), as follows:

- 1.00–1.80 = Very Low
- 1.81–2.60 = Low
- 2.61–3.40 = Moderate
- 3.41–4.20 = High
- 4.21–5.00 = Very High

Before conducting inferential analysis, a normality test using the Kolmogorov–Smirnov method was performed. The data were considered normally distributed if the significance value was greater than 0.05 (Annisa, 2024). Finally, simple linear regression analysis was employed to examine the influence of Differentiated Instruction on students' motivation in learning English.

3. Results

This section presents the findings obtained from the analysis of the Differentiated Instruction and Students' Motivation questionnaires. The analysis begins with descriptive statistics to identify the overall tendencies of each variable and indicator. It is followed by a normality test to examine whether the data met the assumptions required for parametric analysis. Finally, simple linear regression and hypothesis testing were conducted to determine the influence of Differentiated Instruction on students' motivation in learning English.

Descriptive Analysis of Variables

One of the analysis conducted in this study is descriptive analysis, which aims to provide an initial overview of the objects or variables being studied. The descriptive analysis used in this research is the mean analysis, which is employed to determine the average value of each variable along with its respective indicators.

Variabel X (Differentiated Instruction)

Table 1. Descriptive Analysis Differentiated Instruction

Indicator	Mean	Description
Content	4,05	High
Process	4,07	High
Product	3,86	High
Total	3,99	High

The descriptive analysis indicates that differentiated instruction was implemented consistently across all instructional dimensions. Among the three dimensions, process differentiation emerged as the most prominent aspect, suggesting that teachers were more likely to adjust instructional strategies, learning activities, and classroom interactions than to modify learning content or assessment products.

This pattern reflects the practical nature of process differentiation, as adapting teaching methods can be more readily integrated into daily classroom practices while accommodating students' diverse learning needs. The finding also implies that teachers emphasized creating flexible and interactive learning experiences to encourage students' engagement and participation in English learning.

Variabel Y (Students' Motivation)

Table 2. descriptive analysis intrinsic Motivation

Indicator	Mean	Description
Fulfillment of Basic Needs	3,94	High
Learning Experience	3,81	High
Autonomy and Self Reward	3,90	High
Personal Interest in the Subject	3,99	High
Total	3,92	High

The descriptive analysis indicates that students demonstrated a high level of intrinsic motivation across all measured indicators. Overall, the findings suggest that students were internally motivated to engage in learning English, reflecting positive attitudes toward the learning process and a strong willingness to participate without relying solely on external rewards. Among the indicators, personal interest in the subject emerged as the strongest aspect, indicating that students showed genuine interest and enjoyment in learning English.

Meanwhile, autonomy and self-reward received the lowest mean score, suggesting that although students were motivated, they were relatively less likely to regulate their own learning or rely on internal self-reinforcement compared to other aspects of intrinsic motivation. Overall, these findings imply that students' intrinsic motivation was supported primarily by their interest in the subject and the fulfillment of their learning needs.

Table 3. Descriptive Analysis Extrinsic Motivation

Indicator	Mean	Description
Academic Demands or Formal Requirements	4,02	High
Rewards and Punishments	3,70	High
Social Support/Expectations	3,87	High
Practical/Career Goals	4,08	High
Total	3,91	High

The descriptive analysis indicates that students demonstrated a high level of extrinsic motivation across all measured indicators. Overall, the findings suggest that external factors played an important role in encouraging students to engage in English learning. Among the indicators, practical and career goals emerged as the strongest source of motivation, indicating that students were highly motivated by the perceived long-term benefits of learning English for their future education and career opportunities.

In contrast, rewards and punishments represented the least dominant source of motivation, suggesting that students were less dependent on external incentives or disciplinary consequences to participate in learning activities. Overall, these findings imply that students' extrinsic motivation was driven more by future-oriented aspirations than by immediate external rewards or sanctions.

Nevertheless, when compared with the overall mean score of intrinsic motivation, students' intrinsic motivation was found to be slightly higher. This indicates that, although both types of motivation were high, students' engagement in learning English was influenced marginally more by internal factors, such as personal interest and enjoyment of learning, than by external incentives.

Normality Test

The normality test was conducted to examine whether the data in the regression model were normally distributed, which is one of the key assumptions in parametric statistical analysis. In this study, the normality test was performed using the Kolmogorov–Smirnov test with the assistance of SPSS version 25.0.

Table 4. Normality Test

			Unstandardized Residual
N			39
Normal Parameters ^{a,b}		Mean	.0000000
		Std.	10.01671760
		Deviation	
Most	Extreme	Absolute	.075
Differences		Positive	.072
		Negative	-.075
Test Statistic			.075
Asymp. Sig. (2-tailed)			.200

The Kolmogorov–Smirnov test indicated that the data were normally distributed (Asymp. Sig. = .200, $p > .05$). This result was consistent with the Normal P–P Plot, in which the data points closely followed the diagonal line. Therefore, the normality assumption required for regression analysis was met.

Simple Linear Regression Analysis

Simple linear regression analysis was conducted to examine the effect of Differentiated Instruction on Students' Motivation. The results of the regression analysis are presented in Table 5:

Model	R	R ²	Adjusted R ²	Std.Error of the Estimate	Durbin–Watson
1	.496	.246	.225	10.151	1.807

Table 5 presents the model summary of the simple linear regression analysis examining the relationship between differentiated instruction and students' motivation. The results showed a correlation coefficient of $R = .496$, indicating a moderate positive relationship between differentiated instruction and students' motivation. Furthermore, the coefficient of determination ($R^2 = .246$) indicates that differentiated instruction explained 24.6% of the variance in students' motivation,

while the remaining 75.4% may be attributed to other factors not included in this study.

The adjusted R^2 value of .225 suggests that the explanatory power of the model remained relatively stable after adjusting for the sample size. Overall, these findings indicate that differentiated instruction made a meaningful contribution to explaining students' motivation, although other variables beyond the scope of this study also influenced students' motivation.

Source	Sum of Squares	df	Mean Square	F	p
Regression	1241.592	1	1241.592	12.049	.001
Residual	3812.716	37	103.046		
Total	5054.308	38			

Table 6 presents the ANOVA results of the simple linear regression model. The analysis showed that the regression model was statistically significant, $F(1, 37) = 12.049$, $p = .001$, indicating that differentiated instruction significantly predicted students' motivation. These findings demonstrate that the regression model was appropriate for explaining the relationship between differentiated instruction and students' motivation.

Table 5. Simple Linear regression Analysis

Predictor	B	β	t	p
Constant	13.080	–	0.419	.678
Differentiated Instruction	1.696	.496	3.471	.001

Based on Table 4, the regression equation can be formulated as follows:

$$\hat{Y} = 13.080 + 1.696X$$

Table 6 presents the regression coefficients of the simple linear regression model. The results indicate that differentiated instruction had a positive and statistically significant effect on students' motivation ($B = 1.696$, $\beta = .496$, $t = 3.471$, $p = .001$). The positive regression coefficient indicates that each one-unit increase in differentiated instruction was associated with a 1.696-unit increase in students'

motivation. Based on the regression equation, $Y = 13.080 + 1.696X$, students' motivation is expected to increase as the level of differentiated instruction increases. These findings suggest that greater implementation of differentiated instruction is associated with higher levels of students' motivation.

Instrument Validity and Reliability

Prior to data collection, validity and reliability tests were conducted using SPSS version 25.0. The validity test employed Pearson Product-Moment correlation. The results showed that all questionnaire items for both the Differentiated Instruction (X) and Students' Motivation (Y) variables had corrected item-total correlation values higher than the r-table value of 0.361, indicating that all items were valid.

Furthermore, the reliability test was conducted using Cronbach's Alpha. The results revealed that the Differentiated Instruction questionnaire obtained a reliability coefficient of $\alpha = .810$, while the Students' Motivation questionnaire achieved $\alpha = .858$. Since both coefficients exceeded the minimum reliability threshold of 0.60, the instruments were considered reliable for data collection.

4. Discussion

The findings of this study suggest that differentiated instruction contributes positively to students' motivation by creating learning environments that are more responsive to students' diverse readiness levels, interests, and learning profiles. Rather than simply demonstrating a significant statistical relationship, these findings indicate that differentiated instruction supports learning experiences in which students feel better accommodated according to their individual needs. When instruction is adapted to students' characteristics, learners are more likely to participate actively, experience success in learning activities, and develop a more positive attitude toward learning English. This finding is consistent with Tomlinson (2017), who argues that differentiated instruction enables teachers to address learner diversity by adapting instruction according to students' readiness, interests, and learning profiles.

An important finding of this study is that process differentiation emerged as the most prominent dimension of differentiated instruction. This suggests that teachers tended to modify instructional strategies, learning activities, and classroom interactions more frequently than learning content or assessment products. One possible explanation is that process differentiation is more practical and flexible to implement in everyday classroom practice because teachers can adjust teaching methods, collaborative activities, questioning techniques, and learning media without substantially altering curriculum objectives or instructional materials (Tomlinson, 2017).

Within the implementation of the Merdeka Curriculum, which emphasizes student-centered learning, flexibility, and active participation, adapting the learning process becomes one of the most feasible approaches for accommodating students' diverse learning needs while maintaining common learning goals (Kemendikbudristek, 2022). Consequently, the dominance of process differentiation may also explain why differentiated instruction was associated with higher levels of students' motivation, as students were provided with learning experiences that were more engaging and responsive to their individual characteristics.

From a psychological perspective, these findings can be explained through Self-Determination Theory (Deci & Ryan, 1985; Ryan & Deci, 2020), which proposes that students are more motivated when their psychological needs for autonomy and competence are fulfilled. Differentiated instruction provides students with meaningful opportunities to make choices regarding how they learn, complete learning tasks, and demonstrate their understanding. Such flexibility promotes students' sense of autonomy because they become active participants rather than passive recipients of instruction. When learners perceive that they have meaningful control over aspects of their learning, they are more likely to develop intrinsic motivation and willingly engage in classroom activities (Ryan & Deci, 2020).

In addition, differentiated instruction strengthens students' sense of competence by ensuring that learning tasks are appropriately matched to their readiness levels. Learning activities that are neither excessively difficult nor overly easy allow students to experience achievable challenges and repeated academic success. These positive learning experiences foster students' confidence in their abilities, which subsequently reinforces their willingness to participate in future learning activities (Ryan & Deci, 2020). This finding indicates that the motivational benefits of differentiated instruction are not solely derived from instructional variation but also from students' perceptions that they can succeed within appropriately designed learning environments.

Differentiated instruction also enhances students' engagement by encouraging active participation through collaborative learning, varied instructional strategies, and interactive classroom activities. Instead of relying on a single instructional approach, teachers create multiple pathways for students to interact with learning materials according to their preferences and abilities. Such learning experiences encourage students to participate more actively throughout the learning process.

This increased engagement reflects one of the key outcomes of differentiated instruction, as students are more likely to become actively involved when learning activities are aligned with their readiness, interests, and learning profiles (Tomlinson, 2001). Greater engagement not only improves students' attention during classroom instruction but also increases their emotional investment in

learning, thereby strengthening their overall motivation to achieve learning goals.

Furthermore, differentiated instruction promotes learner agency by positioning students as active participants in the learning process. Students are encouraged to make meaningful choices, take responsibility for completing learning tasks, and demonstrate their understanding in different ways. This supports the student-centered nature of differentiated instruction described by Tomlinson (2001) and aligns with Self-Determination Theory, which emphasizes that autonomy enhances students' intrinsic motivation (Deci & Ryan, 1985).

These findings therefore suggest that the positive influence of differentiated instruction on students' motivation is not merely the result of varying instructional methods but rather the psychological experiences created through learning environments that simultaneously support students' autonomy, competence, engagement, and learner agency.

The present study also contributes to the growing body of research on differentiated instruction by providing empirical evidence from a rural Indonesian junior high school implementing the Merdeka Curriculum. While previous studies have predominantly examined differentiated instruction in urban schools or more resource-rich educational settings, this study demonstrates that differentiated instruction can also be implemented effectively in schools with more limited educational resources. These findings suggest that the successful implementation of differentiated instruction depends less on the availability of sophisticated facilities and more on teachers' pedagogical flexibility in responding to students' diverse learning needs (Tomlinson, 2017). Consequently, These findings extend previous studies conducted by Massaad and Chaker (2020), Sapan and Mede (2022), and Saputri et al. (2023).

While previous studies largely focused on higher education or urban educational settings, the present study demonstrates that differentiated instruction can also support students' motivation in a rural junior high school implementing the Merdeka Curriculum. This finding suggests that the effectiveness of differentiated instruction is influenced not only by instructional strategies but also by how teachers adapt those strategies to diverse classroom contexts.

From a pedagogical perspective, these findings imply that English teachers should adopt instructional practices that provide greater flexibility while accommodating students' diverse learning characteristics. Practical implementation strategies may include flexible grouping, tiered learning activities, differentiated questioning techniques, collaborative learning, varied instructional media, and opportunities for students to choose how they complete learning tasks or demonstrate their understanding. Such practices not only facilitate differentiated instruction but also promote students' autonomy, competence, engagement, and learner agency, all of which contribute to sustaining students' learning motivation (Tomlinson, 2017; Ryan & Deci, 2020).

Therefore, teachers are encouraged to extend differentiation beyond instructional processes by gradually incorporating more diverse learning materials and assessment products to achieve a more comprehensive implementation of differentiated instruction.

Despite these contributions, several limitations should be acknowledged. First, this study relied on self-report questionnaires, which may be subject to social desirability bias and may not fully reflect students' actual classroom experiences. Second, the relatively small sample size limits the generalizability of the findings to broader educational contexts. Third, because the study was conducted in a single rural junior high school, the findings should be interpreted cautiously when applied to schools with different demographic characteristics or educational settings.

Future research is therefore recommended to involve larger and more diverse samples across multiple schools and to incorporate additional data collection methods, such as classroom observations or interviews, to obtain a more comprehensive understanding of how differentiated instruction influences students' motivation.

5. Conclusion

This study concludes that the implementation of *Differentiated Instruction* (DI) in English language learning at SMPN 10 Satu Atap Wonosari has a positive and significant contribution to students' learning motivation. The results of the descriptive analysis indicate that the DI variable falls into the very good category, with Process Differentiation as the most dominant indicator ($M = 4.07$). This suggests that variations in instructional strategies, the use of diverse media, and adaptive learning activities are the elements most strongly perceived by students in addressing their learning needs.

Regarding the motivation variable, the findings reveal that the level of students' learning motivation is categorized as high. Dimensional analysis shows that although the *Practical/Career Goals* indicator has the highest individual score ($M = 4.08$), cumulatively, the Intrinsic Motivation dimension ($M = 3.915$) has a slightly higher mean compared to extrinsic motivation ($M = 3.910$). This finding demonstrates that differentiated instructional strategies not only support students' instrumental goals but also more profoundly foster their curiosity and internal satisfaction in learning English.

Overall, there is a strong linear relationship between the two variables, where an improvement in the quality of differentiated instruction implementation is followed by a significant increase in students' learning motivation. Therefore, this study recommends that educators consistently implement differentiation, particularly in the aspects of process and product, in order to sustain and enhance students' learning enthusiasm in the long term.

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