The Effect of Differentiated Learning on Students' Learning Outcomes in Islamic Religious Education at Senior High Schools

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Article info	Abstract
	This study aims to examine the effect of differentiated instruction on students' learning outcomes in Islamic Religious Education (IRE), specifically in the cognitive, affective, and psychomotor domains, among tenth-grade students at SMAN 82 Jakarta. The study employed a quantitative associative research design. The population consisted of 92 students, with 90 students selected as the sample using a simple random sampling technique. Data were collected through questionnaires and documentation of students' IRE achievement scores and analyzed using descriptive statistics and multivariate analysis (MANOVA) with SPSS version 26. The results indicate that differentiated instruction has a statistically significant simultaneous effect on students' cognitive, affective, and psychomotor learning outcomes. Among these domains, the affective domain showed the strongest effect, suggesting that differentiated learning is particularly effective in enhancing students' attitudes, motivation, and religious awareness. These findings confirm that differentiated instruction is a relevant and effective pedagogical approach in Islamic Religious Education, especially in supporting the implementation of the Merdeka Curriculum, which emphasizes student-centered, inclusive, and adaptive learning practices. ***Keywords:*** *Differentiated Instruction, Learning Outcomes, Islamic Religious Education*

Abstrak

Penelitian ini bertujuan untuk menganalisis pengaruh pembelajaran berdiferensiasi terhadap hasil belajar Pendidikan Agama Islam (PAI) pada ranah kognitif, afektif, dan psikomotorik siswa kelas X di SMAN 82 Jakarta. Penelitian ini menggunakan pendekatan kuantitatif dengan desain asosiatif. Populasi penelitian berjumlah 92 siswa, dengan sampel sebanyak 90 siswa yang dipilih menggunakan teknik simple random sampling. Data dikumpulkan melalui angket dan dokumentasi nilai hasil belajar PAI, kemudian dianalisis menggunakan statistik deskriptif dan analisis multivariat (MANOVA) dengan bantuan SPSS versi 26. Hasil analisis menunjukkan bahwa pembelajaran berdiferensiasi berpengaruh signifikan secara simultan terhadap hasil belajar kognitif, afektif, dan psikomotorik siswa. Pengaruh terbesar ditemukan pada ranah afektif, yang menunjukkan bahwa pembelajaran berdiferensiasi efektif dalam meningkatkan sikap, motivasi, dan kesadaran beragama siswa. Temuan ini menegaskan bahwa pembelajaran berdiferensiasi merupakan strategi yang relevan dan efektif dalam pembelajaran PAI, khususnya dalam mendukung implementasi Kurikulum Merdeka yang menekankan pembelajaran berpusat pada peserta didik dan menghargai keberagaman karakteristik siswa.

Kata Kunci: Pembelajaran Berdiferensiasi, Hasil Belajar, Pendidikan Agama Islam

INTRODUCTION

Education plays a fundamental role in shaping the quality of human resources capable of competing in an increasingly dynamic global era. In the Indonesian context, education is not merely directed toward cognitive mastery but also encompasses affective and psychomotor development as part of holistic human formation. Islamic Religious Education holds a strategic position within this framework, as it functions as a medium for cultivating spiritual awareness, moral integrity, and social responsibility among students. Through the internalization of Islamic values, PAI contributes significantly to character formation, ethical reasoning, and the development of students' religious identity in a pluralistic society (Ernawati et al., 2023; Hasanah, 2022; Satariyah & Nandar, 2022).

Numerous studies emphasize that PAI is not solely an academic subject but a cornerstone of students' personal and moral development. By fostering values such as discipline, empathy, tolerance, and social responsibility, PAI equips students with the moral foundation necessary to navigate complex societal challenges (Irfan et al., 2023; Puspitasari et al., 2022; Salsabila et al., 2022). Furthermore, the integration of practical religious experiences such as community engagement and ethical decision-making enhances students' ability to apply Islamic teachings in real-life contexts, thereby reinforcing character education and mitigating moral decline in contemporary society (Dewi, 2023; Ghani et al., 2023).

Despite its crucial role, the implementation of PAI at the senior high school level continues to face persistent challenges. Learning practices remain predominantly teacher-centered, relying heavily on lectures, memorization, and limited instructional media. Such approaches often result in passive student participation and reduce the meaningfulness of learning experiences. These conditions contradict the principles of the *Merdeka Curriculum*, which emphasizes student-centered, active, contextual, and inclusive learning (Kemendikbudristek, 2022). Consequently, traditional instructional methods have proven insufficient in addressing the increasingly diverse characteristics of learners.

Learners differ significantly in terms of cognitive abilities, learning readiness, interests, cultural backgrounds, and learning styles, all of which influence learning outcomes. Research highlights that students' readiness levels, motivation, and preferred learning styles determine how effectively they engage with instructional content (Huda & Nurhuda, 2023; Siswanto et al., 2023). Aligning learning activities with students' interests has been shown to enhance motivation and retention, while diagnostic assessments help teachers design instruction responsive to individual readiness levels (Aniah et al., 2023; Badriyah et al., 2023). These variations underscore the necessity for adaptive instructional approaches that can accommodate learner diversity within a single classroom.

However, PAI instruction in Indonesia has often been criticized for maintaining a homogeneous orientation that inadequately responds to multicultural realities and diverse student needs. Such homogeneity may limit the development of tolerance, inclusivity, and critical engagement with contemporary social issues. Scholars argue that PAI curricula must integrate multicultural perspectives and contextual relevance to foster coexistence and respect within Indonesia's plural society (Gultom & Lubis, 2024; Yasin & Rahmadian, 2024). Teacher competence also emerges as a critical factor, as insufficient training in inclusive and multicultural pedagogy hampers effective classroom implementation (Hair & Wahyuni, 2023; Tang et al., 2024).

Differentiated instruction emerges as a promising pedagogical response to these challenges. Defined as an instructional approach that adapts content, process, and learning products based on students' readiness, interests, and learning profiles, differentiated learning aims to create equitable and meaningful learning experiences (Tomlinson, 2023; Yulaichah et al., 2024). Empirical evidence suggests that differentiated instruction enhances academic achievement, learning motivation, and critical thinking skills by allowing students to engage with learning tasks aligned with their individual potentials (Alfina et al., 2024; Pasaribu, 2024; Tirtawati, 2024).

Previous studies report positive outcomes of differentiated learning, including increased student participation, improved cognitive achievement, and heightened learning motivation (Fithriani et al., 2023; Hati, 2023). Nevertheless, its implementation remains constrained by limited instructional time, complex lesson planning, and teachers' preparedness in managing heterogeneous classrooms (Rahmawati, 2021; Rohmaniyah et al., 2024). Moreover, empirical research examining the impact of differentiated instruction specifically on PAI learning outcomes at the senior high school level—particularly across cognitive, affective, and psychomotor domains—remains limited.

Therefore, this study seeks to address this research gap by examining the effect of differentiated instruction on Islamic Religious Education learning outcomes at SMAN 82 Jakarta within the context of the *Merdeka Curriculum*. By investigating its influence across cognitive, affective, and psychomotor domains, this research aims to contribute both theoretically and practically to the development of adaptive PAI instructional strategies. The findings are expected to enrich the scholarly discourse on differentiated learning in religious education and provide practical guidance for teachers in designing inclusive, participatory, and meaningful PAI learning experiences.

METHODS

This study employed a quantitative associative research design and was conducted with tenth-grade students at SMAN 82 Jakarta during the even semester of the 2024/2025 academic year. The research population consisted of 92 students distributed across three classes, with approximately 30–32 students per class. From this population, 90 students were selected as research participants using probability

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sampling with a simple random sampling technique. The sampling process was carried out using an Excel-based randomizer to ensure that each student had an equal opportunity to be selected, thereby minimizing researcher bias and maintaining population representativeness. Data were collected using two types of instruments: a social skills questionnaire adapted from the *Social Skills Rating System* (SSRS) developed by Gresham and Elliott (1990), and documentation of students' summative final-semester scores in the subject of Islamic Religious Education and Character Education. The questionnaire was translated and culturally adapted to the Indonesian context and employed a five-point Likert scale ranging from strongly disagree (1) to strongly agree (5), consisting of both favorable and unfavorable items to reduce response bias.

To ensure instrument quality, validity testing was conducted using Pearson's product-moment correlation, retaining items with correlation coefficients exceeding the critical r-value at a 0.05 significance level. Reliability testing employed Cronbach's alpha, with coefficients greater than 0.70 indicating acceptable internal consistency. Data collection procedures involved distributing the social skills questionnaire directly to students during class sessions under teacher supervision, with an average completion time of 25–30 minutes. Academic achievement data were obtained from official school records, resulting in both primary (questionnaire) and secondary (documentation) data sources. Data analysis was conducted in two stages: descriptive analysis to compute means, standard deviations, frequencies, and percentages, followed by inferential analysis using multiple regression with SPSS version 26. Prior to hypothesis testing, classical assumption tests—including normality, linearity, and homoscedasticity—were performed to ensure that the data met regression analysis requirements, allowing for valid interpretation of the results.

RESULTS AND DISCUSSION
Results
Overview of the Research Data

This section presents the empirical findings of the study concerning the effect of differentiated learning on students' learning outcomes in Islamic Religious Education and Character Education. The results are based on data collected from 92 tenth-grade students of SMAN 82 Jakarta. The independent variable examined in this study was differentiated instruction, while the dependent variables included cognitive, affective, and psychomotor learning outcomes. Data were obtained through questionnaires and academic documentation, which were subsequently analyzed using descriptive and inferential statistical techniques. The presentation of results is intended to provide a comprehensive and systematic understanding of the distribution of data and the relationships among the studied variables.

Descriptive statistical analysis was conducted to describe the tendency, distribution, and variability of students' responses toward differentiated learning and

learning outcomes. This analysis serves as a foundational step prior to inferential testing and allows for a clearer interpretation of students' perceptions and performance. The data presented in this section reflect students' real learning experiences during the implementation of differentiated instruction in Islamic Religious Education. Furthermore, the descriptive findings help identify patterns that support the subsequent multivariate analysis. Overall, this section provides a detailed picture of how differentiated learning was perceived and how learning outcomes were achieved.

Scoring System and Response Measurement

Before analyzing the questionnaire results, it is essential to explain the scoring system used in this study. The questionnaire employed a Likert scale designed to capture variations in students' perceptions and attitudes accurately. Both positive and negative statements were included to reduce response bias and encourage more thoughtful answers. Each response option was assigned a numerical score based on the nature of the statement. This scoring method ensured consistency and objectivity in data interpretation.

Table 1. Scoring Criteria for Questionnaire Responses

Positive Statements	Score	Negative Statements	Score
Strongly Agree	4	Strongly Agree	1
Agree	3	Agree	2
Disagree	2	Disagree	3
Strongly Disagree	1	Strongly Disagree	4

Table 1 illustrates that positive and negative statements were scored inversely to maintain balance in response interpretation. For positive items, higher agreement indicated stronger endorsement, while for negative items, higher disagreement reflected a more favorable perception. This approach minimizes acquiescence bias and enhances the reliability of the data. By applying this scoring system, the questionnaire results could be quantitatively analyzed with greater accuracy. Consequently, the scores obtained genuinely represent students' perceptions of differentiated learning and their learning outcomes.

Descriptive Analysis of Differentiated Learning Implementation

The descriptive analysis of the differentiated learning variable aimed to evaluate how well differentiated instruction was implemented in Islamic Religious Education classes. Fourteen questionnaire items were used to measure students' perceptions of differentiated content, learning processes, and learning products. These items reflected instructional practices such as variation in learning materials, teaching methods, and assessment options. The analysis provides insights into the extent to which teachers accommodated students' diverse needs and learning preferences. Understanding this

variable is essential, as it forms the basis for examining its influence on learning outcomes.

Table 2. Descriptive Results of Differentiated Learning Variable (X)

No.	Statement	SA	A	D	SD
1	The teacher provides learning materials with varying levels of difficulty.	9 (9.8%)	62 (67.4%)	20 (21.7%)	1 (1.1%)
2	Students are allowed to choose learning materials according to their learning interests.	18 (19.6%)	42 (45.7%)	29 (31.5%)	3 (3.3%)
3	The teacher provides visual materials, texts, or videos according to students' learning styles.	0 (0.0%)	36 (39.1%)	56 (60.9%)	0 (0.0%)
4	The teacher provides various learning methods such as discussions, experiments, or demonstrations.	39 (42.4%)	49 (53.3%)	4 (4.3%)	0 (0.0%)
5	Students feel more comfortable listening to the teacher's direct explanation.	48 (52.2%)	43 (46.7%)	1 (1.1%)	0 (0.0%)
6	Students learn better through practice or hands-on activities.	34 (37.0%)	49 (53.3%)	8 (8.7%)	1 (1.1%)
7	Students are allowed to choose how to complete exercises according to their comfort.	19 (20.7%)	55 (59.8%)	17 (18.5%)	1 (1.1%)
8	The teacher facilitates individual, group, and pair work.	0 (0.0%)	16 (17.4%)	51 (55.4%)	25 (27.2%)
9	Students are allowed to choose the form of the final task (poster, video, written work, etc.).	13 (14.1%)	46 (50.0%)	29 (31.5%)	4 (4.3%)
10	The teacher sets general criteria that can be achieved in different ways.	13 (14.1%)	73 (79.3%)	6 (6.5%)	0 (0.0%)
11	Students express their	0 (0.0%)	27	65	0 (0.0%)

No.	Statement	SA	A	D	SD
	learning outcomes according to their strengths.		(29.3%)	(70.7%)	
12	I understand religious values from Islamic Religious Education lessons.	55 (59.8%)	37 (40.2%)	0 (0.0%)	0 (0.0%)
13	I feel more aware of the importance of practicing religious teachings.	56 (60.9%)	35 (38.0%)	1 (1.1%)	0 (0.0%)
14	I feel that Islamic Religious Education materials are relevant to daily life.	0 (0.0%)	51 (55.4%)	41 (44.6%)	0 (0.0%)

Note:

SA = Strongly Agree, A = Agree, D = Disagree, SD = Strongly Disagree.

The results in Table 2 indicate that most students responded positively to the implementation of differentiated learning. High percentages of agreement were found in statements related to the provision of varied learning methods and flexible achievement criteria. These findings suggest that teachers made efforts to diversify instructional strategies to support different learning styles. However, several items, particularly those related to flexible grouping arrangements, received higher levels of disagreement. This indicates that while differentiated learning was implemented, some aspects were not consistently applied across all learning activities.

Descriptive Analysis of Affective and Psychomotor Learning Outcomes

The dependent variables in this study included affective and psychomotor learning outcomes, which were measured through 19 questionnaire items. Affective outcomes covered students' attitudes, motivation, religious awareness, and ethical behavior. Psychomotor outcomes focused on students' abilities to practice religious rituals and apply religious values in daily life. These dimensions are crucial in Islamic Religious Education, as learning objectives extend beyond cognitive achievement. The descriptive analysis highlights how students perceived their development in these domains.

Table 3. Descriptive Results of Learning Outcomes Variables (Y)

No.	Statement	SA	A	D	SD
1	I am able to remember and explain the content of Islamic Religious Education lessons.	9 (9.8%)	41 (44.6%)	36 (39.1%)	6 (6.5%)
2	I am able to complete Islamic Religious Education assignments or tasks well.	9 (9.8%)	53 (57.6%)	26 (28.3%)	4 (4.3%)

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3	I understand the concepts taught in Islamic Religious Education lessons.	32 (34.8%)	60 (65.2%)	0 (0.0%)	0 (0.0%)
4	I feel happy and interested when learning Islamic Religious Education.	27 (29.3%)	64 (69.6%)	1 (1.1%)	0 (0.0%)
5	I respect my classmates' opinions during discussions in Islamic Religious Education lessons.	48 (52.2%)	43 (46.7%)	1 (1.1%)	0 (0.0%)
6	I try to be honest and disciplined after learning Islamic Religious Education.	7 (7.6%)	12 (13.0%)	40 (43.5%)	33 (35.9%)
7	I am able to correctly recite daily prayers.	24 (26.1%)	68 (73.9%)	0 (0.0%)	0 (0.0%)
8	I understand the pillars of faith and the pillars of Islam from Islamic Religious Education lessons.	50 (54.3%)	41 (44.6%)	1 (1.1%)	0 (0.0%)
9	I am able to participate in religious practices taught at school.	0 (0.0%)	47 (51.1%)	45 (48.9%)	0 (0.0%)
10	Islamic Religious Education lessons make me more confident that religion is important in my life.	42 (45.7%)	50 (54.3%)	0 (0.0%)	0 (0.0%)
11	I try to practice religious teachings such as praying and supplication after learning Islamic Religious Education.	63 (68.5%)	29 (31.5%)	0 (0.0%)	0 (0.0%)
12	I try to apply religious values in my daily behavior.	0 (0.0%)	46 (50.0%)	46 (50.0%)	0 (0.0%)

13	I practice religious skills such as ablution or prayer correctly.	26 (28.3%)	58 (63.0%)	7 (7.6%)	1 (1.1%)
14	I feel that my learning outcomes show improvement.	22 (23.9%)	61 (66.3%)	8 (8.7%)	1 (1.1%)
15	I am able to achieve the learning objectives according to the targets.	7 (7.6%)	67 (72.8%)	18 (19.6%)	0 (0.0%)
16	I feel that Islamic Religious Education lessons help my personal development.	14 (15.2%)	75 (81.5%)	3 (3.3%)	0 (0.0%)
17	I often feel confused when learning Islamic Religious Education in class. (Unfavorable)	0 (0.0%)	23 (25.0%)	69 (75.0%)	0 (0.0%)
18	The teacher rarely provides choices in methods or types of assignments. (Unfavorable)	13 (14.1%)	72 (78.3%)	6 (6.5%)	1 (1.1%)
19	I feel that all students are treated the same without considering different needs. (Unfavorable)	35 (38.0%)	55 (59.8%)	2 (2.2%)	0 (0.0%)

Note:

SA = Strongly Agree, A = Agree, D = Disagree, SD = Strongly Disagree.
Items marked as Unfavorable were reverse-scored during data analysis.

Table 3 shows that students generally demonstrated positive learning outcomes across affective and psychomotor dimensions. High agreement levels were observed in items related to understanding religious concepts, enjoying Islamic Religious Education lessons, and practicing religious obligations. However, several items revealed moderate levels of uncertainty, particularly in consistently applying religious values in everyday behavior. These findings suggest that while learning outcomes are generally positive, continued reinforcement and contextual learning are needed. Overall, the results indicate that Islamic Religious Education contributed meaningfully to students' character and skill development.

Multivariate Analysis Results (MANOVA)

Inferential statistical analysis was conducted using Multivariate Analysis of Variance (MANOVA) to examine the simultaneous effect of differentiated learning on multiple learning outcomes. Prior to conducting MANOVA, classical assumption tests confirmed that the data met the requirements of normality, linearity, and homogeneity of variance. MANOVA was selected because it allows for the analysis of more than one dependent variable simultaneously. This method provides a more comprehensive understanding of the overall impact of differentiated learning. The results of the multivariate tests are presented below.

Table 4. Multivariate Test Results (MANOVA)

Test Statistic	Value	F	Hypothesis df	Error df	Sig.	Partial Eta Squared
Pillai's Trace	.705	1.556	45.000	228.000	.020	.235
Wilks' Lambda	.402	1.760	45.000	220.616	.004	.262
Hotelling's Trace	1.229	1.985	45.000	218.000	.001	.291
Roy's Largest Root	.983	4.980[a]	15.000	76.000	.000	.496

Table 5. Univariate Test Results for Learning Outcomes

Dependent Variable	Source	Sum of Squares	df	Mean Square	F	Sig.	Partial Eta Squared
Cognitive	Contrast	104.267	15	6.951	2.534	.004	.333
	Error	208.461	76	2.743	–	–	–
Affective	Contrast	216.853	15	14.457	3.930	.000	.437
	Error	279.582	76	3.679	–	–	–
Psychomotor	Contrast	68.240	15	4.549	2.653	.003	.344
	Error	130.314	76	1.715	–	–	–

Table 4 and 5 demonstrates that all multivariate test statistics, including Wilks' Lambda, Pillai's Trace, Hotelling's Trace, and Roy's Largest Root, produced significant results ($p < .05$). These findings indicate that differentiated learning has a statistically significant simultaneous effect on students' learning outcomes. The partial eta squared values suggest a moderate to large effect size, highlighting the practical significance of the findings. Thus, differentiated learning contributes meaningfully to improvements in Islamic Religious Education outcomes.

Partial Effects and Regression Analysis

Further analysis was conducted to examine the partial effects of differentiated learning on each learning outcome domain. The univariate test results revealed significant effects on cognitive, affective, and psychomotor outcomes. Among these domains, the affective domain showed the strongest effect size, indicating that differentiated learning was particularly effective in shaping students' attitudes and religious awareness. These findings align with the objectives of Islamic Religious Education, which emphasize character formation. The results underscore the importance of instructional flexibility in fostering holistic student development.

Regression analysis revealed positive relationships between differentiated learning and all learning outcome variables. The regression equations indicated that increases in differentiated learning scores were associated with increases in cognitive, affective, and psychomotor outcomes. Specifically, a one-point increase in differentiated learning score resulted in increases of 0.246 in cognitive outcomes, 0.362 in affective outcomes, and 0.185 in psychomotor outcomes. These results demonstrate that differentiated learning exerts a consistent and positive influence across multiple domains. Consequently, differentiated instruction emerges as an effective pedagogical approach in Islamic Religious Education.

Discussion

The findings of this study demonstrate that differentiated instruction has a significant positive effect on students' learning outcomes in Islamic Religious Education, encompassing cognitive, affective, and psychomotor domains. The multivariate analysis confirmed that differentiated learning simultaneously influenced all three domains, with the strongest effect observed in the affective domain. This result aligns with the fundamental objectives of Islamic Religious Education, which emphasize character formation, moral awareness, and the internalization of religious values in addition to academic achievement. The high mean scores across variables indicate that differentiated instruction was perceived positively by students and implemented at a relatively effective level. These findings suggest that instructional practices accommodating students' differences contribute meaningfully to holistic learning outcomes.

The positive effect of differentiated instruction on cognitive outcomes supports previous studies emphasizing its role in enhancing conceptual understanding and academic performance. Research by Suryati et al (2024) and Zhong (2023) asserts that adjusting content, process, and learning products based on students' readiness and learning profiles can improve comprehension and retention. Similarly, Alfina et al (2024) and Pasaribu (2024) found that differentiated instruction significantly improved students' cognitive achievement by allowing learners to engage with materials at appropriate levels of difficulty. However, the effect size for the cognitive domain in this study was moderate compared to affective outcomes, suggesting that while

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differentiated instruction enhances understanding, cognitive gains may also depend on other factors such as instructional time, assessment design, and students' prior knowledge. This finding contrasts with Hati (2023), who reported stronger cognitive gains in analytically demanding subjects, indicating that subject characteristics may influence the magnitude of cognitive effects.

The affective domain showed the strongest influence from differentiated instruction, as indicated by the highest partial eta squared value. This finding is consistent with studies highlighting the effectiveness of differentiated learning in fostering motivation, engagement, and positive attitudes toward learning. Haelermans (2022), Handa (2020), Alfiyanto & Hidayati (2022), Rahman et a (2023), and Susanti et al (2022) reported that differentiated strategies increased students' participation, enthusiasm, and sense of ownership in learning activities. In the context of Islamic Religious Education, these affective improvements are particularly significant, as they relate to students' awareness, appreciation, and commitment to religious values. The result also supports Alfiyanto et al (2024), Satariyah & Nandar (2022), and Wahyudi et al (2024) who emphasized that student-centered and flexible learning environments enhance moral and character development. Thus, differentiated instruction appears to be especially effective in achieving the affective goals of Islamic Religious Education.

Regarding psychomotor outcomes, the study found a significant positive effect of differentiated instruction, although the effect size was lower than that of the affective domain. This result indicates that differentiated learning contributes to students' ability to practice religious skills, such as prayer and other forms of worship, but may require more structured and sustained practice to achieve optimal outcomes. Previous studies by Minangkabau et al (2024) and Tirtawati (2024) similarly found that differentiated and activity-based learning improved students' practical skills, particularly when combined with hands-on and experiential learning approaches. However, some studies have noted challenges in consistently implementing differentiated practices for psychomotor skills due to limited class time and large class sizes (Rahmawati, 2021). These constraints may explain why psychomotor gains, while significant, were not as strong as affective gains in this study.

Despite the overall positive findings, this study also reveals areas that warrant critical reflection. Descriptive results showed that not all aspects of differentiated instruction were implemented consistently, particularly in flexible grouping and allowing students to express learning outcomes according to their strengths. This finding aligns with Rohmaniyah et al (2024) and Susanti et al (2022), who reported that teachers often face difficulties in managing heterogeneous classrooms and designing varied learning products. Furthermore, some unfavorable responses indicated that students still perceived uniform treatment in certain instructional practices, suggesting partial implementation of differentiation. These findings highlight that while differentiated instruction is effective, its impact depends heavily on teachers' pedagogical competence and institutional support. Therefore, future research and

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professional development programs should focus on strengthening teachers' capacity to implement differentiated instruction comprehensively, especially in Islamic Religious Education contexts.

CONCLUSION

This study concludes that differentiated instruction has a significant and positive effect on students' learning outcomes in Islamic Religious Education at the senior high school level. The findings indicate that differentiated learning simultaneously influences cognitive, affective, and psychomotor domains, with the strongest impact observed in the affective domain. This suggests that instructional practices that accommodate students' readiness, interests, and learning profiles are particularly effective in fostering students' attitudes, motivation, and religious awareness. Overall, the implementation of differentiated instruction contributes meaningfully to holistic learning outcomes in Islamic Religious Education.

Furthermore, the results highlight the importance of differentiated instruction as a pedagogical strategy aligned with the objectives of the *Merdeka Curriculum*, which emphasizes student-centered and inclusive learning. Despite its positive impact, the study also reveals that differentiated instruction has not yet been implemented consistently across all instructional aspects, indicating the need for improved teacher competence and institutional support. Therefore, it is recommended that teachers receive continuous professional development to strengthen their ability to design and manage differentiated learning environments. Future research is encouraged to explore differentiated instruction in broader contexts and with diverse research designs to further validate and expand these findings.

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