The Development of Microsoft 365-Based Islamic Education Modules to Improve Learning Outcomes at SMP Negeri 1 Sedayu

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Kata Kunci:	ABSTRACT
Pendidikan Agama Islam dan Budi Pekerti, Modul Microsoft 365, Hasil Belajar	Tujuan penelitian ini adalah untuk meningkatkan hasil belajar siswa SMP Negeri 1 Sedayu Kelas VII pada mata pelajaran Pendidikan Agama Islam dan Budi Pekerti dengan menggunakan modul pembelajaran Microsoft 365. Pengumpulan data, desain produk, validasi, revisi, uji coba, dan pengembangan akhir adalah semua bagian dari metode penelitian dan pengembangan (RnD) Sugiyono. Hasil penelitian digunakan untuk menilai efektivitas modul dengan menggunakan statistik sampel berpasangan, korelasi, dan uji-t menggunakan SPSS 25.0. Penelitian menunjukkan bahwa modul valid dengan nilai validitas 90,8 persen dan nilai validitas materi 92 persen. Hasil belajar siswa juga meningkat secara signifikan, dengan nilai rata-rata meningkat dari nilai pre-test 67,19 pada menjadi 85,70 pada nilai post-test. Keefektifan modul sebagai alat bantu pembelajaran ditunjukkan dengan koefisien korelasi 0,471 dan tingkat signifikansi 0,000 ($p < 0,05$).

Keywords:	ABSTRACTS
Islamic Religious Education and Ethics, Microsoft 365 Module, Learning Outcomes	*This research aimed to enhance learning outcomes for seventh-grade students at SMP Negeri 1 Sedayu in Islamic Religious Education and Ethics through a Microsoft 365-based learning module. Using Sugiyono's Research and Development (RnD) method, the process included data collection, product design, validation, revisions, trials, and final development. The module's effectiveness was assessed with paired sample statistics, correlation, and t-tests using SPSS 25.0. Results showed the module's practicality, with 90.8% validity and 92% material validity. Student*

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outcomes significantly improved, with average scores rising from 67.19 (pre-test) to 85.70 (post-test). The correlation coefficient was 0.471, and the significance level was 0.000 (p < 0.05), confirming the module's efficacy as a teaching tool.

A. INTRODUCTION

The onset of the Industrial Revolution has catalyzed significant transformations in various spheres, including digitalization, globalization, and demographic shifts. These developments profoundly influence numerous aspects of human life, culture, and lifestyle (Apriliyanti 2019). In the realm of education, the advent of diverse learning media has emerged as a pivotal tool to enhance educational processes, transcending geographical, political, and social constraints (Syahri 2019). However, according to the Programme for International Student Assessment (PISA) 2018 data, Indonesia ranks 72nd out of 78 countries in literacy skills, 72nd out of 78 countries in numeracy skills, and 70th out of 78 countries in science skills (Schleicher 2019). These rankings indicate that Indonesia remains significantly behind other nations in terms of literacy, numeracy, and scientific competencies.

The advent of the Fourth Industrial Revolution has precipitated substantial changes in various facets of human life (Prawironegoro, Rifan, and Arqam 2022). Concurrently, novel concepts related to religiosity, particularly divergent social values regarding spirituality and wisdom, have emerged (Syahri 2019). Islam, as a religion embodying the principle of Rahmatan lil'alamin and grounded in the Qur'an and Hadith, should serve as a source of inspiration and guidance in navigating these challenges (Nugroho and Arqam 2024). The Qur'an, being timeless in its relevance, must be adaptable to the evolving contexts of contemporary society (Arqam, Suwarno, and Shalihin 2023) (Yumarni 2019). Integrating advanced technology with the Qur'an as a primary reference can enhance the application and evaluation of educational systems, techniques, and methodologies, thereby fostering improved teaching and learning activities (Budiyono 2019).

Students enrolled in public schools encounter significant challenges due to the relatively limited exposure to Islamic education compared to their peers in Integrated Islamic, Muhammadiyah, or similar institutions (Wantini et al. 2023). To cultivate wisdom and internalize the values of Islamic education both in school and within the broader community, these students must develop and harness their talents and potential (Wahidah et al. 2022). This endeavor is crucial in the current advanced era, where students are expected to be proficient, knowledgeable, and highly competitive (Bustam et al. 2021). An Islamic education that emphasizes innovation is instrumental in enabling students to learn about Islam comprehensively while also expanding their intellectual capabilities (Nursa 2021).

This is evidenced by the significant number of students—30%, or 63 out of 214—who scored below the learning objective completeness criteria in their summative assessments. The lowest score recorded was 25, and the average score among those below the criteria was 68.37. These results indicate that learning outcomes, a key indicator of academic achievement, remain suboptimal. Passive learning approaches contribute to these deficiencies, as they impede the development of essential social, cognitive, and interpersonal skills (Primadoniati 2020). These competencies are crucial for students' success in real-life situations. (Maksum 2019).

Islamic Religious Education and Budi Pekerti must strive to integrate Islamic values with technological proficiency, enabling students to meet contemporary challenges and demands (Nugroho and Arqam 2024). Microsoft 365 is a valuable tool that can facilitate this integration. It provides a platform for teachers and students to collaborate on assignments and share learning resources effectively via the internet

(Poniran et al. 2023). This application supports the educational process by fostering a collaborative learning environment and enhancing the accessibility of educational materials (Martin and Tapp 2019). Modules support learning by delivering knowledge and guidance aligned with the school curriculum (Laila Nursafitri, Widi Widaryanto, and Ahmad Zubaidi 2020). These comprehensive modules cover a wide range of subjects, encouraging learners to enhance their critical thinking skills and engage in constructive activities. The modules include observational tasks and active participation in problem-solving training sessions. While negative influences can impede student progress, positive motivation is crucial for fostering engagement (Jafnihirda, Rizal, and Pratiwi 2023). Consequently, these modules significantly impact student learning outcomes, although the degree of influence varies among individuals.

At SMP Negeri 1 Sedayu, teachers utilize learning modules to complement the educational process. However, students have expressed dissatisfaction with the previously used Islamic Religious Education and Ethics module. Several factors contribute to this discontent, including an unengaging structure, irrelevance to learning objectives, and an unattractive presentation (Yarudin et al. 2022). Effective learning modules should facilitate the educational process for both educators and students, making learning more efficient and impactful. Modules that foster active learning and center the learning experience around students can significantly enhance their motivation and engagement (Perawironegoro 2022).

Previous studies by researchers such as Ruri Afria Nursa (2020), Hikmatunazilah (2019), Soleha (2020), and Dedi Irawan (2021) have explored the development of learning modules for Islamic Religious Education and Ethics. However, there is currently a gap in the literature regarding thorough and in-depth discussions on the development of such modules specifically based on Microsoft 365. This gap suggests an opportunity for further research to explore how Microsoft 365 can be effectively integrated into the development of learning modules for Islamic Religious Education and Ethics, potentially enhancing educational outcomes through technological innovation. The novelty of research on the development of Microsoft 365-based Islamic Religious Education and Budi Pekerti learning modules lies in its utilization of Microsoft 365 applications within these subjects. According to existing literature, no previous studies have focused on the development of such modules specifically using Microsoft 365. This research aims to contribute significantly to the field of education, particularly in Islamic Religious Education and Budi Pekerti, by offering an alternative approach to learning materials that are engaging, learner-centered, and enjoyable. It is anticipated that these modules will enhance student learning outcomes by fostering a more interactive and effective learning environment. The study is grounded in the absence of Microsoft 365-based PAI and BP modules at SMP Negeri 1 Sedayu. The selection of student learning outcomes as the research object stems from identified deficiencies in students' cognitive understanding, which directly impacts their academic performance at the school. This research seeks to address these challenges through the development and implementation of innovative learning modules tailored to the specific educational needs of the students.

Based on the explanation provided, it is evident that the researcher is motivated to investigate and has endeavored to develop a Microsoft 365-based Islamic Religious Education and Budi Pekerti Learning module. Through the implementation of this Microsoft 365-based module, students are anticipated to benefit from enhanced

comprehension, increased motivation to learn, and improved proficiency in utilizing information technology. This approach aims to make learning more engaging and relevant, ultimately aiming to elevate learning outcomes, particularly in Islamic Religious Education and Budi Pekerti for Grade VII students at SMP Negeri 1 Sedayu.

B. METHOD

This research adopts the Research and Development (R&D) approach, specifically utilizing Sugiyono's development model. The choice of this model is motivated by the aim to create a straightforward, comprehensive, ideal, and easily implementable product. The outcome of this research is a Microsoft 365 module designed for Islamic Religious Education and Budi Pekerti subjects, intended as supplementary learning material. The development process followed ten distinct stages outlined in Sugiyono's model. This research included validation tests conducted by two experts, namely material experts and module experts, using expert judgment as the validation method. The data collection techniques employed in this research development include interviews, observations, and questionnaires. The data in this study consist of pre-test and post-test results presented in quantitative form. These data were analyzed using the Statistical Product and Service Solutions (SPSS) 25.0 program. Specifically, the analysis utilized the Paired Samples T-Test, which aims to determine if there is a statistically significant change in values within one sample before and after a treatment or intervention program. This hypothesis testing method is crucial for evaluating the effectiveness of the Microsoft 365-based learning module developed in this research.

C. RESULT AND DISCUSSION
Development of PAI modules in PAI and BP based on Microsoft 365

The stages followed in this study adhere to Sugiyono's theoretical framework. The researchers completed all ten stages of the research and development (R&D) process, which are outlined as follows:

1. Potential and Problems

    Potential can be defined as latent value that, when harnessed, yields significant benefits (Sugiyono 2014). Conversely, a problem arises when there is a discrepancy between desired outcomes and actual circumstances (Sugiyono 2014). Research endeavors aim to address such discrepancies by developing effective models, patterns, or integrated systems for resolution. Therefore, through rigorous observation, the researcher identified several noteworthy aspects encompassing both potentials and challenges within the scope of this study.

    According to Principal Mrs. N, SMP Negeri 1 Sedayu faces challenges with student literacy competency scores, as noted during initial observations at the research site. Despite an improvement reported in the 2023 education report card, Mrs. N expressed concern over the school's comparatively low literacy competency scores. This observation highlights a potential area for investigation and development within this study. This indicates that the National Assessment questions are challenging for students at SMP Negeri 1 Sedayu. However, there is potential for improvement, as the teachers frequently use Microsoft 365 in their teaching practices, and students are already familiar with this application.

Currently, teachers primarily utilize the Microsoft Forms feature for summative assessments, such as daily, mid-semester, and end-of-semester evaluations. Additionally, student interest in the existing PAI and BP modules is low due to a lack of innovation, unattractive design, and some content not aligning with the current curriculum. Therefore, there is a clear need for the development of innovative, engaging, and learner-centered learning modules to enhance student interest and performance. This has resulted in a low proportion of learners meeting the learning objective completeness criteria during summative assessments, with 30% (63 out of 214 learners) scoring below the benchmark. Additionally, the lowest score recorded was 25, and the average score of those below the criteria was 68.37.

From this description, it can be concluded that there is a significant issue with low learning outcomes based on summative assessment results. This indicates a need for targeted efforts and interventions to implement learner-centered approaches by educators, with the goal of enhancing student learning outcomes.

2. Data Collection

At this stage, researchers collected various relevant data and literature to design products aimed at addressing the previously described problems. The data collection process involved observations and interviews with several teachers and students of SMP Negeri 1 Sedayu. These interactions focused on identifying issues in classroom learning activities, exploring potential solutions, and gathering feedback on the creation of Microsoft 365 modules for PAI and BP subjects. The findings from these efforts are as follows:

"*The learning methods employed by teachers at this school have stagnated in recent years. There is a need to introduce new knowledge and learning methods to enhance the quality of education. This necessity has been frequently discussed in meetings and socialization sessions at the Principal Work Conference forum. This need is driven by the demands of the Central Education Office following the replacement of the national exam with the National Assessment (AN). The National Assessment measures several competencies, including students' literacy and numeracy skills, which affect school report cards. These skills are closely related to the 4C competencies (critical thinking, communication, collaboration, and creativity) in students.*" (Interview with Mrs. N, Principal of SMP Negeri 1 Sedayu).

The interviews conducted with the principal revealed that the school needs a recent breakthrough to assist students and subject teachers, particularly in PAI and BP subjects, in developing the 4C competencies (critical thinking, communication, collaboration, and creativity). These competencies are closely related to student learning outcomes and have a significant impact on the school's education report cards (Adib and Hasanah 2023). If students are cognitively engaged and master the 4C competencies (critical thinking, communication, collaboration, and creativity), their learning experiences will become more diverse and lead to improved learning outcomes (Ma'ruf, Syafii, and Kusuma 2019). Moreover, when classroom learning is meaningful and effectively applied by students, it not only positively impacts their learning outcomes but also enhances their moral behavior in their daily lives at home, school, and within the community (Camelia 2021). Classroom learning often tends to be monotonous, causing students to lose focus on the knowledge conveyed by the teacher. To counter this, teachers should aim to actively engage students'

cognitive abilities, enabling them to integrate new information within their existing knowledge framework (Akbar and Arqam 2021).

During the learning process, students should be encouraged to actively construct their own understanding and connect new experiences, events, and information to their pre-existing knowledge structure (Baharuddin 2020).

3. Product Design

At this stage, researchers referred to guidelines from the Education Standards, Curriculum, and Assessment Agency of the Ministry of Education, Culture, Research, and Technology, as well as Microsoft 365 guidelines, for creating the learning modules (Anggraena et al. 2022; Murray 2011). This module is designed for Grade VII Islamic Religious Education and Ethics classes at the junior high school level, utilizing Microsoft 365 as a learning platform aimed at enhancing learning outcomes.

The module's front page design or cover differs from that of existing modules. To maintain visual interest, the researcher incorporated various fonts and colors to enhance the module cover's visual appeal. Aligning color schemes with student characteristics and lesson content can positively influence psychological engagement (Abidah et al. 2020).

Figure 1. Module cover design

The content of this module focuses on Islamic Religious Education (PAI) and Budi Pekerti (BP) subjects titled "*Al-Qur'an dan Sunnah sebagai Pedoman Hidup*," designed to activate students' cognitive abilities and provide a meaningful learning experience. The material adheres to guidelines for writing learning modules established by the Curriculum Standards and Educational Assessment Agency of the Indonesian Ministry of Education, Culture, Research, and Technology (Anggraena et al. 2022).

Figure 2. Module table of contents

In this module, researchers have developed a comprehensive lesson plan accessible to both educators and learners to facilitate effective preparation for learning (Manalu, Sitohang, and Turnip 2022). This lesson plan includes essential elements outlined in the following figure:

Figure 3. list of learning plan elements

The author develops learning objectives to illustrate the final achievements or skills that learners must have for each lesson they experience. The learning objectives can be seen through the following figure:

Figure 4. Description of learning objectives

The figure 4 displays learning objectives aligned with the independent curriculum, which aid learners in identifying the specific goals they need to achieve. For educators, these objectives serve as a foundation for developing learning models tailored to the established objectives (Marsela Yulianti et al. 2022).

The author has incorporated a Literacy Rubric into the learning activities to enhance students' literacy competencies. This rubric includes a column where students ask questions to their peers, fostering critical thinking and collaboration among students (Beddu 2019). It also outlines achievement indicators that students are expected to demonstrate (Ma'ruf, Syafii, and Kusuma 2019).
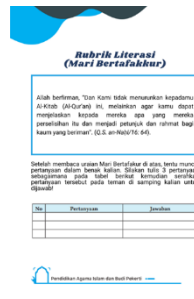

Figure 5. Student Literacy Rubric

In the summative assessment assessment rubric, there are five key elements that are assessed, including assessment of the aspects of faith and devotion to God Almighty, and noble character, critical reasoning, creativity, mutual cooperation, and global diversity (Karuna, Serpara, and Van Delsen 2023). The entire assessment sheet is prepared by following the previously formulated achievement indicators.

4. Expert Judgement Results

The Microsoft 365-based PAI learning module has been validated by module experts in this research design on Tuesday, August 22, 2023, the validator is Muhammad Zulham, M.Pd and Galih Seto Wicaksono, S.P.W.K.. The reason the researcher chose him was because of his role and actions in using teaching methods using Microsoft 365. The average validation score of the module is 90.8%. This indicates that the Microsoft 365 module for PAI and BP subjects successfully enhances the learning outcomes of seventh-grade students at SMP Negeri 1 Sedayu, particularly in terms of overall appearance and adherence to specific criteria, demonstrating high validity.

The Microsoft 365-based PAI learning module was validated by material experts in this research design on Tuesday, August 22, 2023. Dra. Titik Rukmini, M.Pd and Wahyu Nur Setiyawan, S.T.. served as the validator. The average validation score for the material in the module is 92%. These results signify that the Microsoft 365 module for PAI and BP subjects is highly valid in terms of relevance, accuracy, and appropriateness of presentation aligned with student-centered learning approaches, aiming to enhance the learning outcomes of seventh-grade students at SMP Negeri 1 Sedayu.

5. Design Revision

In response to feedback from validators, including module experts and material experts in this study, researchers worked on revising and improving Microsoft 365 module products in PAI and BP subjects. This process was conducted after the product validation was completed and involved updating specific aspects highlighted by the material experts and module experts. In particular, the feedback that has been submitted by the module experts, for the addition of a glossary segment. The addition of the glossary segment is expected to help learners enrich diverse vocabularies to support learners' literacy competencies.

6. Product Trial Results

The next stage in this research involves product testing. After revising the Microsoft 365 module based on feedback from the expert team following validation for PAI and BP subjects, testing was conducted with seventh-grade students at SMP Negeri 1 Sedayu. Participants in this online trial included seventh-grade students from the school.

Students played a crucial role as contributors, providing feedback and critical observations on the developed module, which was instrumental in enhancing their learning outcomes (Aisyah Ayun Khoirurrizki and Betty Mauli Rosa Bustam 2023). Critical thinking skills are increasingly emphasized in education, enabling students to tackle complex questions effectively (Nugroho and Arqam 2024). Additionally, literacy competency is a key component assessed in frameworks such as PISA (Wantini et al. 2023).

The trial involved 10 students as participants/respondents. The technical procedure involved obtaining permission and readiness from the participants/respondents for the trial. Subsequently, the researcher distributed several questions along with the prepared Microsoft 365-based PAI and BP module. This module included a simple questionnaire link for respondents, prepared according to Sugiyono's instrument guide and the Learning Assessment Guide.

7. Product Revision

Based on the data collected from the limited product trial phase, the next step in this research is to refine and improve the product based on the trial findings. The objective is to develop a more optimal product, addressing any shortcomings while integrating suggestions and feedback from the respondents (Sugiyono 2014). This iterative process aims to enhance the module's effectiveness and relevance in supporting learning outcomes for seventh-grade students at SMP Negeri 1 Sedayu.

8. Usage Trial

In this phase, a larger user group was involved compared to the product trial phase. A total of 64 students participated, comprising two Grade 7 classes from SMP Negeri 1 Sedayu, with 32 students in each class. This marks a substantial increase from the initial 10 participants in the product trial phase. The researcher conducted the usage trial and did not encounter any significant issues, indicating that the product performed well with the expanded user base. The usage trial took place at SMP Negeri 1 Sedayu over a span of 4 sessions, each lasting 3 lesson hours (120 minutes), totaling four times within a month. This trial engaged students from 2 sample classes who received instruction using the designed module. The trial adhered to the procedures outlined in the accompanying lesson plan or teaching module.

9. Product Revision

Based on the results of the implementation trials conducted by the researcher, it is concluded that the Microsoft 365 module developed for Islamic Religious Education (PAI) and Character Education (BP) subjects is highly feasible and does not necessitate further product improvement. This conclusion is based on the positive feedback from the usage trials involving 64 Grade VII students at SMP Negeri 1 Sedayu, indicating that the module performed very well. Therefore, there is no need for a product revision phase.

10. Final Product

This phase signifies the culmination of the research and development (R&D) methodology led by Sugiyono. To reach this stage, the R&D process has been meticulously executed. The researcher embarked on a systematic journey starting with the analysis of potentials and problems, followed by extensive information gathering, product design, validation by both module and subject matter experts, culminating in validation of the module's effectiveness. This was followed by multiple trial phases, iterative refinement, and revision stages to ensure the module's readiness for implementation.

After meticulously following the 10 steps outlined by Sugiyono, the researcher has successfully developed a Microsoft 365 module for Islamic Religious Education (PAI) and Character Education (BP), designed to improve student learning outcomes in these subjects for Grade VII students at SMP Negeri 1 Sedayu.

Effectiveness of The Development of Microsoft 365-Based Islamic Education Modules

The implementation of Microsoft 365 modules in Islamic Religious Education (PAI) and Character Education (BP) instruction presents several compelling benefits that can significantly enhance student learning outcomes. These benefits are aligned with the principles of Edgar Dale's Cone of Learning, which emphasizes the effectiveness of hands-on and experiential learning methods (Jafnihirda, Rizal, and Pratiwi 2023). The development and implementation of Microsoft 365 modules for Islamic Religious Education (PAI) and Character Education (BP) are in perfect alignment with the principles of Constructivist Theory. This theory underscores the significance of active student engagement and self-directed learning, which facilitate a profound comprehension of the subject matter (Suparlan 2019). Following the successful completion of product trials and development procedures for the Microsoft 365 modules in Islamic Religious Education (PAI) and Character Education (BP), the next crucial step is to rigorously evaluate the modules' effectiveness in enhancing student learning outcomes. This evaluation is essential to ensure that the modules are meeting their intended objectives and contributing to improved student understanding of PAI and BP concepts (Sugiyono 2014). Researchers can employ a multifaceted approach to assess the effectiveness of the Microsoft 365 modules, integrating both quantitative and qualitative data collection methods. This mixed-methods approach aims to provide a comprehensive understanding of the modules' impact, considering both measurable learning outcomes and students' qualitative experiences with the modules (Mutiara and Bustam 2024).

To evaluate the effectiveness of the Microsoft 365 modules in Islamic Religious Education (PAI) and Character Education (BP) instruction, researchers employed a quantitative approach. This involved measuring the difference in student performance before and after using the modules. The evaluation was conducted with 64 Grade VII students at SMP Negeri 1 Sedayu. Initially, researchers administered a 20-question pre-test to 32 students in Grade VII F and another 20-question pre-test to 32 students in Grade VII D. Following the module usage, a post-test was administered to assess any improvements in student understanding and knowledge retention.

The pre-test results highlight varying levels of understanding among the students in Islamic Religious Education (PAI) and Character Education (BP) concepts. Scores

ranged from a minimum of 10 correct answers, representing a 50% score, to a maximum of 18 correct answers, indicating a 90% score. The average score across all students was 67%. These results illustrate a spectrum of comprehension levels, suggesting some students have a solid grasp of the material while others may require additional support to enhance their understanding.

Following the administration of the pre-test, the subsequent stage involved implementing classroom instruction using the Microsoft 365 module in accordance with predefined protocols. This instructional phase culminated after four sessions of learning, whereupon the researcher administered a post-test. Notably, the post-test questions were identical to those presented in the pre-test, ensuring consistency in assessment across both testing phases. This methodological approach aimed to measure the impact of the Microsoft 365 module on student learning outcomes in Islamic Religious Education (PAI) and Character Education (BP), adhering rigorously to established research procedures. Based on the post-test results, students achieved scores ranging from 13 correct answers, equivalent to 65%, to 19 correct answers, scoring 95%. The average percentage score for the post-test across all participants is 86%. These findings indicate a notable improvement in student understanding following the implementation of the Microsoft 365 module in Islamic Religious Education (PAI) and Character Education (BP).

Based on the results, students' cognitive learning outcomes significantly improved when using the Microsoft 365 module for PAI and BP subjects. The highest observed increase was 45%, with an average increase of 19% from an initial score of 67% to a post-test score of 86%. These results underscore the substantial positive impact of the Microsoft 365 module on enhancing student learning outcomes in PAI and BP subjects.

The researcher proceeded with statistical analysis using a paired sample t-test to compare the results of the pre-test and post-test administered to the respondents. The analysis was conducted using Statistical Product and Service Solutions (SPSS) 25.0 software.

1. Paired Sample Statistics Test

Table 1. Descriptive comparison data

		Mean	N	Std. Deviation	Std. Error Mean
Pair 1	PRE TEST	67.1875	64	14.49891	1.81236
	POST TEST	85.7031	64	9.42250	1.17781

Based on the descriptive comparison data table provided, it is evident that there is a notable increase in student learning outcomes in PAI and BP subjects following the implementation of the Microsoft 365 module. Before using the module, the average score was 67.1875, while after its implementation, the average score rose to 85.7031. This increase indicates a substantial improvement in student performance. The study involved 64 respondents out of a total population of 224 students, highlighting the significant impact of the module on enhancing learning outcomes in PAI and BP subjects as developed by the researchers.

2. Paired Sample Correlation Test

Table 2. Paired Sample Correlation Test Results

		N	Correlation	Sig.
Pair 1	PRE TEST & POST TEST	64	.471	.000

The table presented above illustrates the outcomes of the paired samples correlation test, indicating the statistical relationship between pre-test and post-test variables among students. The computed correlation coefficient stands at 0.471, with a significance value of 0. This significance value, typically considered when it falls below the threshold of 0.05, signifies that there exists a statistically significant relationship between the pre-test and post-test variables. This finding suggests that initial performance on the pre-test is predictive of subsequent performance on the post-test following the implementation of the Microsoft 365 module in PAI and BP subjects.

3. Paired Samples Test

Table 3. Paired Simple Test Results

| | Paired Differences | | | | | | | |
| | Mean | Std. Deviation | Std. Error Mean | 95% Confidence Interval of the Difference | | t | df | Sig. (2-tailed) |
				Lower	Upper			
PRE TEST - POST TEST	-18.516	13.053	1.632	-21.776	-15.255	-11.348	63.0	0.000

The table presents the results of the Paired Samples t-test conducted on pre-test and post-test scores from a cohort of 64 students. The observed mean difference in scores is 18.516, rounded to 19. Furthermore, the Paired Samples t-test yields a significance value of 0.000, which is less than the conventional threshold of 0.05 (0.000 < 0.05), indicating a statistically significant difference between pre-test and post-test results. Therefore, based on these findings, it can be concluded that the Microsoft 365 module implemented for Islamic Religious Education and Character Education effectively enhances student learning outcomes.

4. CONCLUSION

The research has successfully developed Microsoft 365 modules tailored for Islamic Religious Education (PAI) and Character Education (BP) subjects aimed at enhancing the learning outcomes of seventh-grade students at SMP Negeri 1 Sedayu. The modules are structured around the Education Unit Level Curriculum (KOSP), derived from the Merdeka Curriculum, specifically designed for junior high school level seventh graders. Utilizing Sugiyono's ten-step Research and Development (R&D)

methodology, the modules underwent rigorous assessment phases, achieving high validity scores of 90.8% for module validity and 92% for material validity as evaluated by module and material validators. This development endeavor aims to empower students in tackling complex challenges effectively.

The effectiveness of the Microsoft 365 module in improving the learning outcomes of seventh-grade students at SMP Negeri 1 Sedayu in Islamic Religious Education (PAI) and Character Education (BP) subjects was confirmed through statistical analysis. A significance value of 0.000, which is less than 0.05 (0.000 < 0.05), indicates a significant difference between pre-test and post-test scores. Additionally, a correlation coefficient of 0.471, also less than 0.05 (0.471 < 0.05), suggests a significant correlation between pre-test and post-test variables. Descriptively, there was an increase in the mean score from 67.1875 in the pre-test to 85.7031 in the post-test, highlighting improved student learning outcomes in PAI and BP subjects as a result of module implementation.

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