

Enhancing Learning Outcomes: The Impact of OBE-Based Semester Learning Plans in Islamic Studies Courses

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ABSTRAK

Pendekatan Outcome-Based Education (OBE) diterapkan untuk meningkatkan keterlibatan aktif dan hasil belajar mahasiswa yang masih terbatas dalam kurikulum tradisional. Pengembangan RPS berbasis OBE dengan integrasi MBKM menjadi solusi potensial untuk meningkatkan mutu pendidikan. Penelitian ini bertujuan untuk menganalisis efektivitas RPS berbasis OBE dalam meningkatkan hasil belajar kognitif, aktivitas pembelajaran, serta soft skill mahasiswa. Penelitian ini menggunakan metode kuasi eksperimen dengan kelompok kontrol dan eksperimen. Kelompok eksperimen menerapkan RPS berbasis OBE dan sedangkan kelompok kontrol menerapkan RPS konvensional. Subjek penelitian ini berjumlah 40 mahasiswa perguruan tinggi. Data dikumpulkan melalui observasi, kuesioner, dan tes hasil belajar. Hasil penelitian menunjukkan bahwa kelompok eksperimen mencapai tingkat ketuntasan 96%, jauh lebih tinggi dibandingkan dengan kelompok kontrol yang hanya mencapai 64%. Model pembelajaran berbasis proyek dan pemecahan masalah yang diterapkan pada kelompok eksperimen juga terbukti meningkatkan kreativitas, soft skill, dan hasil belajar mahasiswa. RPS berbasis OBE terbukti efektif dalam meningkatkan hasil belajar kognitif, psikomotor, afektif, serta kompetensi mahasiswa. Pembelajaran berbasis proyek dan pemecahan masalah memperkuat aktivitas dan keterlibatan mahasiswa dalam proses pembelajaran, serta mempersiapkan mereka untuk menghadapi tantangan global. RPS berbasis OBE terbukti lebih efektif dibandingkan dengan RPS konvensional dalam meningkatkan hasil belajar, keterampilan kognitif, psikomotor, dan afektif mahasiswa.

ABSTRACT

The Outcome-Based Education (OBE) approach is applied to improve active engagement and student learning outcomes that are still limited in the traditional curriculum. The development of OBE-based RPS with MBKM integration is a potential solution to improve the quality of education. This study aims to analyze the effectiveness of OBE-based RPS in improving cognitive learning outcomes, learning activities, and student soft skills. This study used a quasi-experimental method with control and experimental groups. The experimental group applied OBE-based RPS and while the control group applied conventional RPS. The subjects of this study amounted to 40 college students. Data were collected through observation, questionnaires, and learning outcome tests. The results showed that the experimental group achieved a 96% completion rate, much higher than the control group which only reached 64%. The project-based learning model and problem solving applied to the experimental group were also proven to improve creativity, soft skills, and student learning outcomes. The OBE-based RPS proved effective in improving cognitive, psychomotor, affective learning outcomes and student competencies. Project-based learning and problem solving strengthen students' activities and involvement in the learning process, and prepare them to face global challenges. The OBE-based RPS proved to be more effective than the conventional RPS in improving students' learning outcomes, cognitive, psychomotor, and affective skills.

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1. INTRODUCTION

Education plays an important role in shaping a competitive young generation in the era of globalization and digitalization (Hanna, 2019; Mohamed Hashim et al., 2022). In Indonesia, improving the quality of learning in higher education continues to be pursued through the implementation of the KKNI Curriculum (Indonesian National Qualifications Framework) and the Merdeka Learning Campus Merdeka (MBKM) program. This curriculum is designed with an Outcome-Based Education (OBE) approach, which focuses on achieving competencies that are in line with the needs of industry and the world of work. Technological developments also encourage the integration of digital learning into the curriculum, creating a more interactive and adaptive learning experience (Adeshina, 2024; Alenezi et al., 2023; Isaeva et al., 2025). In the Islamic Religion course, the development of a KKNI-MBKM-based Semester Learning Plan (SSP) with an OBE approach is applied to improve the quality of learning. It accommodates innovative learning methods, such as project-based assignments and collaboration, to strengthen students' cognitive, affective and psychomotor aspects. Thus, the designed curriculum is not only oriented towards academic achievement, but also equips students with relevant skills to face global challenges.

Higher education in the digital era demands innovation in the learning process to improve student engagement and learning outcomes (Roza, 2025; Serrano et al., 2019). One approach that is increasingly being adopted is the development of Outcome-Based Education (OBE)-based Semester Learning Plans (SSPs), which focus not only on academic understanding but also on the development of essential skills according to the needs of the world of work and society. OBE is designed to align learning objectives with real-world challenges, ensuring students have adaptive skills and high competitiveness in the professional environment (Hu, 2024; Lama et al., 2024; Makhmudovich, 2025). The application of project-based and collaborative learning in OBE has proven to be effective in fostering critical thinking skills as well as problem-solving abilities, which are important aspects in students' work readiness. In addition, Generation Z, which dominates the current student population, has a different learning style compared to previous generations (Septian et al., 2024; Septian & Wibisono, 2021). They are more responsive to interactive, technology-based and real-life relevant learning models, making innovative learning approaches a key requirement. In this case, project-based and collaborative models are able to improve students' critical thinking skills and intrinsic motivation, in line with theories that emphasize the importance of autonomy and active involvement in the learning process. Thus, the implementation of OBE-based RPS that integrates project-based and collaborative learning has great potential in creating a learning environment that is more effective, adaptive, and in accordance with the needs of students in the digital era.

Religious education in Indonesia has long been one of the main pillars in the education curriculum, playing a crucial role in shaping the character, morality, and morals of students (Isaeva et al., 2025; Judrah et al., 2024). However, learning methods that are still dominated by conventional approaches, such as an emphasis on memorization and text-based learning, are often considered less than optimal in dealing with the dynamics of the times. In the current era of globalization and digitalization, the world of work demands individuals who not only have a deep understanding of religious values, but are also able to think critically, innovate creatively, and master digital skills (Ariya et al., 2025; Faruq & Bakar, 2025; Setiawan, 2024). Therefore, innovation is needed in religious education learning strategies that are more interactive, technology-based, and able to foster 21st century skills so that students can be more adaptive and competitive in various fields of life. The application of Outcome-Based Education (OBE) in the development of Semester Learning Plan (RPS) aims to respond to the challenges of modern education by emphasizing learning outcomes that are more relevant, measurable, and in accordance with the needs of industry and society. OBE emphasizes the learning process on the expected outcomes of graduates, including critical thinking skills, in-depth analysis, systematic problem solving, and the ability to work in teams effectively (Himmi et al., 2025; Sun & Xu, 2024; Wu et al., 2023). With this approach, students not only gain conceptual understanding, but also develop applicable practical skills, so that they are better prepared to face the dynamics of the world of work and the challenges of real life.

Despite its long-standing implementation, the traditional curriculum still faces significant shortcomings, particularly in fostering active student engagement and achieving optimal learning outcomes (Ojetunde & Ramnarain, 2025; Pak et al., 2020). Conventional teaching methods often emphasize teacher-centered instruction, limiting students' opportunities to actively participate, collaborate, and apply their knowledge in real-world scenarios (Alam, 2023; Bhardwaj et al., 2025; Ghaleb, 2024). As a result, essential skills such as critical thinking, problem-solving, and adaptability remain underdeveloped, making it challenging for graduates to meet the evolving demands of the modern workforce. To address these issues, integrating the Outcome-Based Education (OBE) approach into the development of *Rencana Pembelajaran Semester* (RPS), along with the principles of *Merdeka Belajar Kampus Merdeka* (MBKM), offers a promising solution. OBE shifts the learning paradigm toward well-defined, competency-based outcomes, ensuring that students acquire skills relevant to their careers. Meanwhile, MBKM promotes flexibility and experiential

learning through internships, research, community projects, and interdisciplinary studies. By adopting these approaches, educational institutions can bridge existing gaps in traditional curricula, enhance student engagement, and improve learning effectiveness, ultimately preparing graduates to be more skilled, adaptable, and responsive to industry and societal needs.

Outcome-Based Education (OBE) is a learning approach that focuses on achieving certain competencies and encourages active student involvement in the learning process (Asbari & Nurhayati, 2024; Jintalan, 2025). This approach is designed to ensure that each student not only understands concepts theoretically, but is also able to apply their knowledge and skills in various contexts. In its implementation, students are provided with in-depth and relevant learning experiences through various innovative learning strategies, such as project-based assignments, collaborative activities, as well as the utilization of interactive digital media. In addition, the Merdeka Belajar Kampus Merdeka (MBKM) program also plays a role in developing students' professional skills by providing learning opportunities outside the formal academic environment, such as industry internships, community projects, independent research, and student exchanges. Through this approach, students not only gain academic insights, but also gain practical experience that strengthens their readiness to face the challenges of the world of work. Furthermore, the implementation of technology-based active learning practices has been proven to improve student understanding by providing a more dynamic, interactive and flexible learning experience (Patiño et al., 2023; Safiudin & Hayati, 2025; Spaska et al., 2025). The utilization of digital media allows for the personalization of learning, so students can explore the material according to their own pace and learning style. In addition, more efficient time allocation in the learning process allows students to develop better adaptation skills to the real work environment, making them better prepared and competitive individuals in the ever-evolving professional world.

This study focuses on the effectiveness of development-based Semester Learning Plan (RPS) in improving student engagement and learning outcomes by evaluating the extent to which innovative approaches in RPS design can improve the quality of learning in higher education (Begovic Yahya et al., 2023; Hamzah et al., 2022; Suryanto et al., 2024). The main objectives of this study are to measure the difference in learning outcomes between the control group using conventional RPS and the experimental group implementing development-based RPS, analyze the effect of development-based RPS implementation on increasing students' active engagement and intrinsic motivation, and evaluate the effectiveness of the Merdeka Belajar Kampus Merdeka (MBKM) and Outcome-Based Education (OBE) programs in preparing students to face professional challenges in the era of industry 4.0 and digital society. This research contributes to the development of a higher education curriculum that is more adaptive and aligned with the needs of the modern world of work, and provides insight for educational institutions in adopting more effective learning methods, especially for generation Z who tend to be more responsive to flexible, interactive, and technology-based learning approaches.

Several previous studies have demonstrated the effectiveness of the Outcome-Based Education (OBE) approach in improving the quality of higher education (Begovic Yahya et al., 2023; Dano, 2024). These studies indicate that curriculum development that actively involves lecturers in the formulation of learning outcomes can improve the relevance and effectiveness of learning, as it ensures that the material taught is aligned with industry needs and scientific developments (Crosthwaite et al., 2006; Wahyugi & Siregar, 2025). In addition, other studies have shown that the application of Problem-Based Learning (PBL) and Project-Based Learning (PjBL) methods within the OBE framework can enhance students' creativity and strengthen their cognitive thinking skills in solving complex problems (AlAli, 2024; Das et al., 2024; Kurniawan et al., 2024). Furthermore, activity-based and collaborative learning approaches are proven to contribute significantly to developing students' critical and analytical thinking skills, which are essential competencies in the modern world of work. Other studies confirm that project-based learning not only strengthens students' cognitive understanding of academic concepts, but also helps them develop interpersonal, communication and professionalism skills required in the workplace. Thus, these studies strengthen the argument that the OBE approach, when applied systematically through innovative learning methods, is capable of producing graduates who are better prepared to face global challenges and an ever-evolving industry.

Despite the widespread implementation of the Outcome-Based Education (OBE) approach, several challenges persist, particularly in the readiness of lecturers and students to adapt to curriculum changes that emphasize interactive and project-based learning methods. Many lecturers still rely on traditional, lecture-centered teaching approaches, making the implementation of project- and problem-based learning models less effective (Ekayana et al., 2024; Yuan, 2024). As a result, students struggle to develop critical thinking, creativity, and problem-solving skills essential for their academic and professional success. Additionally, low student engagement and motivation in conventional learning models further hinder effective learning. To address these challenges, this study implements a development-based Rencana

Pembelajaran Semester (RPS) that integrates both the OBE and the Merdeka Belajar Kampus Merdeka (MBKM) approaches. By incorporating digital technology and collaborative tasks, this approach aims to enhance student participation, improve learning outcomes, and better prepare students for the demands of the modern workforce through a dynamic and interactive learning environment.

The uniqueness of this research lies in its innovative application of the Outcome-Based Education (OBE) and Merdeka Belajar Kampus Merdeka (MBKM) approaches in Islamic Religion courses, which have traditionally been dominated by conventional, teacher-centered methods focused on memorization. By integrating project-based learning, digital tools, and collaborative activities, this study seeks to bridge the gap between religious education and the competencies required in today's professional landscape. Rather than limiting learning to rote memorization, this approach encourages students to actively engage in discussions, problem-solving, and real-world applications of religious principles, fostering a deeper understanding of the subject matter. Moreover, this research provides a structured framework for designing course plans that not only preserve the essence of traditional moral education but also cultivate essential 21st-century skills such as critical thinking, creativity, and adaptability. By aligning religious studies with contemporary educational strategies, this study aims to enhance students' ability to navigate global challenges while maintaining their ethical and spiritual foundations, ultimately preparing them for both personal growth and professional success.

This study aims to comprehensively examine the effectiveness of implementing an Outcome-Based Education (OBE)-based Rencana Pembelajaran Semester (RPS) by analyzing its impact on student learning outcomes, engagement, and preparedness for professional challenges. Specifically, this research seeks to compare the differences in learning outcomes between students who utilize OBE-based RPS and those who follow conventional RPS, highlighting the extent to which an outcome-oriented curriculum enhances academic achievement. Furthermore, this study assesses the influence of OBE-based RPS on student engagement, motivation, and participation in learning activities, considering how an interactive and student-centered approach fosters a more dynamic learning experience. Additionally, this research evaluates the extent to which the integration of the Merdeka Belajar Kampus Merdeka (MBKM) and OBE frameworks within the RPS equips students with essential cognitive, psychomotor, and affective competencies, ensuring they are better prepared to navigate professional challenges and meet industry demands.

2. METHOD

This study uses an experimental method with a *pretest-posttest control group design*, where there are two groups: the experimental group and the control group (Febriyanti & Haryanto, 2024; Kohan et al., 2024). In this study, an experimental method with a pretest-posttest control group design was utilized to evaluate the effectiveness of a development-based Semester Learning Plan (RPS) integrated with the Outcome-Based Education (OBE) approach. The research involved two distinct groups: the experimental group, which underwent an intervention through the implementation of the development-based RPS, and the control group, which continued with traditional learning methods. This experimental design facilitated a comparative analysis between the two groups, particularly in terms of student engagement, competency development, and overall learning outcomes following the intervention (Alzubi et al., 2024; Ma et al., 2024). By systematically assessing the differences in performance and response, this study aims to provide empirical evidence on the impact of structured, outcome-oriented instructional strategies in enhancing the quality of education.

The data collection methods in this study involve a combination of assessments, surveys, and direct observations to comprehensively evaluate the learning process and its outcomes. Learning outcomes and competency achievements are measured through pretests and posttests, allowing for an objective comparison before and after the intervention. To gain insight into student engagement, motivation, and perceptions, questionnaires are administered, capturing their responses to the learning experience. Additionally, classroom observations are conducted to assess student participation, the effectiveness of instructional strategies, and the practical implementation of the Rencana Pembelajaran Semester (RPS). Various research instruments are employed to ensure a thorough analysis of the learning process. Standardized learning outcome tests are used to evaluate cognitive, psychomotor, and affective competencies, providing a structured measure of student progress. Observation sheets serve as tools for systematically recording student involvement and assessing the effectiveness of teaching methodologies. A student response questionnaire further examines engagement levels, interest, and overall satisfaction with the instructional approach. Additionally, rubrics designed for project-based and collaborative tasks are utilized to evaluate the quality of student work, ensuring that both individual and group learning objectives

are met effectively. Through this multi-method approach, the study aims to capture a holistic picture of the learning dynamics and the impact of the implemented strategies.

These methods and instruments ensured comprehensive data collection, enabling a detailed analysis of the differences between the experimental and control groups in terms of learning outcomes, engagement, and competency development. The data collection technique in this study uses a combination of tests, questionnaires, and observations. The test is used to measure student learning outcomes cognitively after the learning process is complete. A questionnaire based on the Likert scale was distributed to identify student responses to aspects such as involvement in learning, learning activities, and competency achievement. In addition, observation is used to assess the practicality of RPS in learning activities, such as the management of teaching materials, teaching media, and assignments. The subject of this research is students who take the Islamic Religious Education course at the University of Bengkulu. The research sample consisted of 60 students, who were randomly divided into two groups, namely the experimental group and the control group. This random sampling technique aims to ensure that the two groups have comparable characteristics, in order to minimize research bias.

The research instruments used include test questions, observation sheets, and questionnaires. The test sheet is designed to measure students' cognitive achievement. The questionnaire is used to measure the affective aspects and student responses to the implementation of the RPS, including indicators such as learning activities and involvement in assessment. Meanwhile, the observation guide serves to assess the implementation of learning in the classroom and the achievement of competencies. The data sources in this study come from test results, questionnaire responses, and observation notes. The test results and questionnaires provide a quantitative picture of the differences in achievement and response between the experimental and control groups, while the observation results offer qualitative data related to the effectiveness of the learning practices applied. Data analysis was carried out using descriptive and inferential statistical techniques. Descriptive analysis is used to calculate the average and percentage of achievement of learning outcomes and student responses. To find out the significant difference between the control group and the experimental group, a t-test was used. The t-test allows for hypothesis testing of whether there is a significant difference in learning outcomes and student responses between the two groups after the implementation of development-based RPS.

3. RESULTS AND DISCUSSION

Results

The analysis of student response data demonstrated a clear distinction between the experimental group, which engaged in learning through a development-based Rencana Pembelajaran Semester (RPS), and the control group, which followed a more conventional approach. The findings indicate that students in the experimental group exhibited a significantly higher level of engagement and positive perception of the learning process. This was reflected in the response scores, where the experimental group achieved an impressive 96% across all measured indicators, whereas the control group only reached 67%. These results suggest that the structured and interactive nature of the development-based RPS played a crucial role in fostering a more engaging and effective learning experience. Several key aspects contributed to these differences, including competency achievement, learning activities, and assessment methods. Students in the experimental group responded more favorably to the curriculum structure, the dynamic nature of the learning activities, and the diverse evaluation techniques applied throughout the course. The integration of project-based learning, digital tools, and collaborative tasks likely contributed to higher student motivation and participation. In contrast, the control group, which relied on traditional instructional methods, demonstrated lower engagement, indicating that conventional approaches may not fully support student-centered and competency-based learning. The comparative data between the two groups highlight the advantages of adopting innovative instructional strategies in Islamic education. These findings reinforce the importance of modernizing pedagogical approaches by incorporating interactive and student-centered methodologies that align with Outcome-Based Education (OBE) and the Merdeka Belajar Kampus Merdeka (MBKM) framework. By implementing a more structured and development-focused curriculum, educators can enhance student learning experiences, improve competency acquisition, and better prepare students for the challenges of the modern academic and professional landscape. Control Group Learning Response and Experiment showed in [Figure 1](#).

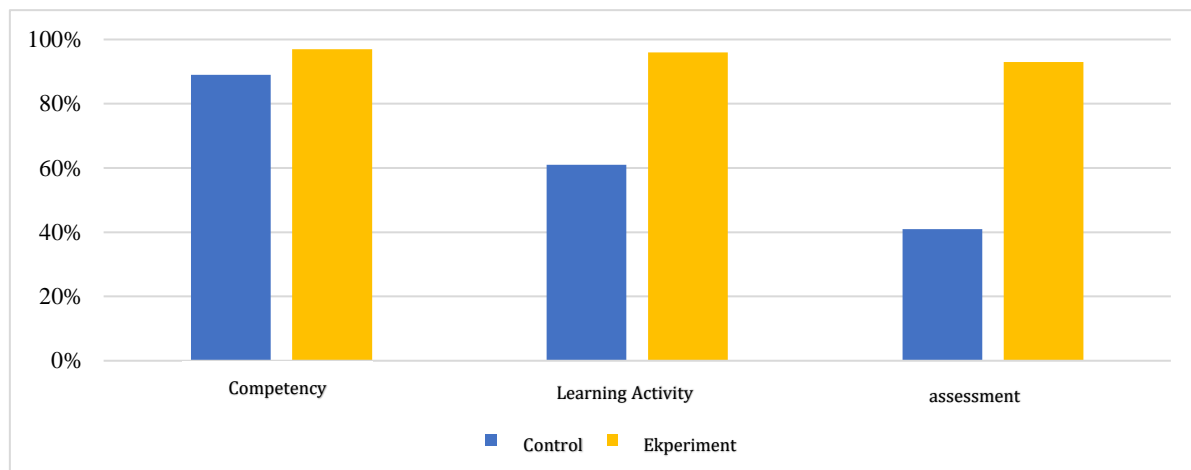


Figure 1. Control Group Learning Response and Experiment

The main aspects measured in student responses, such as competency achievement, learning activities, and assessment, revealed important insights into the effectiveness of the development-based learning model. The positive feedback from students in the experimental group indicated that this approach significantly enhanced their motivation and engagement in the learning process. The students showed a higher level of involvement in various learning activities, actively participating in tasks that were designed to promote critical thinking and problem-solving. Furthermore, the development-based model contributed to a more efficient acquisition of the expected competencies, as students demonstrated a deeper understanding of the subject matter and achieved better learning outcomes. This suggests that the development-based learning model not only improved student participation but also facilitated a more meaningful and impactful learning experience, aligning well with the goals of competency-based education.

The findings from this research underscore the effectiveness of implementing the Semester Learning Plan (RPS) designed using the Outcome-Based Education (OBE) approach, which has significantly improved both the learning process and student outcomes. The development and application of this RPS have demonstrated clear advantages in enhancing the quality of instruction, promoting active student engagement, and fostering competency achievement. When comparing the performance of the experimental group with the control group, a substantial difference was observed, with the experimental group achieving an impressive 96% completion rate, while the control group reached only 64%. This striking difference underscores the positive impact that the MBKM-based RPS has had in increasing the students' ability to meet the expected learning outcomes and achieve a higher level of academic success. Moreover, the inclusion of collaborative projects and assignments in the experimental group played a pivotal role in enhancing students' engagement and participation, as they were more actively involved in their learning. These collaborative tasks not only facilitated the development of intellectual capabilities but also fostered the growth of essential social skills, such as teamwork, communication, and problem-solving, which are crucial for success in both academic and professional settings. The students' ability to work collaboratively in diverse, real-world contexts contributed to a deeper understanding of the subject matter and allowed them to apply theoretical knowledge in practical scenarios. These results confirm that the MBKM-based RPS, with its focus on project-based learning, offers a comprehensive and effective approach to fostering both cognitive and socio-emotional development in students. The comparison of the learning outcomes between the experimental and control groups is visually represented in the following figure, further illustrating the substantial benefits of this innovative teaching strategy. Learning Results of Control and Experimental Groups showed in [Figure 2](#).

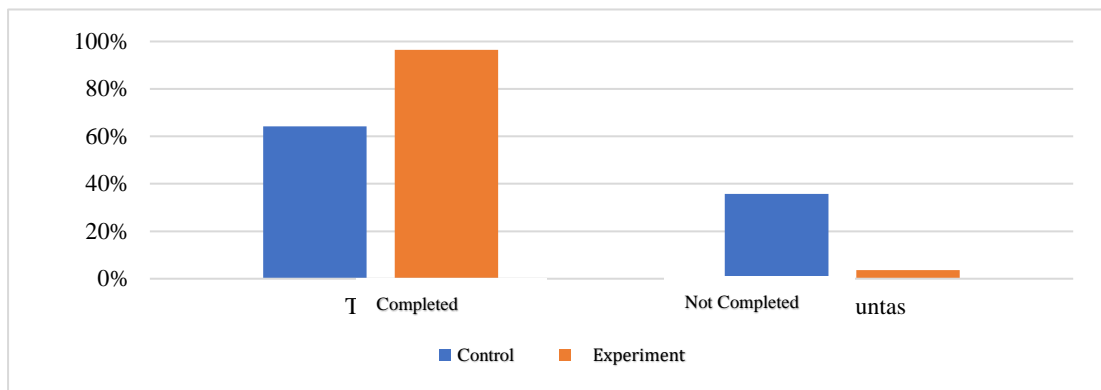


Figure 2. Learning Results of Control and Experimental Groups

The results from the tests administered to both groups revealed substantial differences in learning outcomes, highlighting the effectiveness of the development-based Rencana Pembelajaran Semester (RPS) with the Outcome-Based Education (OBE) approach. The experimental group, which was taught using the development-based RPS, demonstrated remarkable success, achieving a 96% learning completion rate. In contrast, the control group, which followed a traditional learning method, reached only 64%. These findings underscore the significant impact of integrating the OBE framework into the curriculum, as the development-based RPS not only enhanced students' engagement but also facilitated a deeper understanding of the material. The higher level of learning achievement in the experimental group suggests that the application of project-based, interactive learning strategies under the OBE model can greatly improve student learning outcomes compared to conventional teaching approaches.

The implementation of the Rencana Pembelajaran Semester (RPS) is meticulously observed to evaluate the effectiveness and achievement of learning activities. The observation focuses on several crucial aspects, including competency achievement, core learning objectives, teaching materials, teaching media, learning experiences, assignments, and assessments. These components play a pivotal role in ensuring that the learning process is not only comprehensive but also aligned with the intended educational outcomes. The findings from the observers, based on the practical implementation of the Islamic Religious RPS, reveal a distinct contrast between the control group and the experimental group. In particular, the learning activities within the experimental group, which applied the development-based RPS approach, were notably more engaging and productive, as reflected by higher percentage scores compared to those in the control group. This discrepancy highlights the effectiveness of the development-based approach in fostering more active participation and better achievement of learning goals. The comparative analysis, presented in the accompanying figure, further underscores the positive impact of the development-based RPS model, indicating that students in the experimental group experienced more dynamic and interactive learning activities. These findings suggest that the integration of innovative learning strategies, such as project-based tasks and collaborative assignments, significantly enhances student involvement and facilitates a more enriching learning experience. Overall, the data provides compelling evidence that the development-based RPS approach plays a crucial role in improving both the quality of learning activities and the overall student outcomes in Islamic Religious education. Assessment of the Practicalization of Islamic RPS showed in Figure 3.

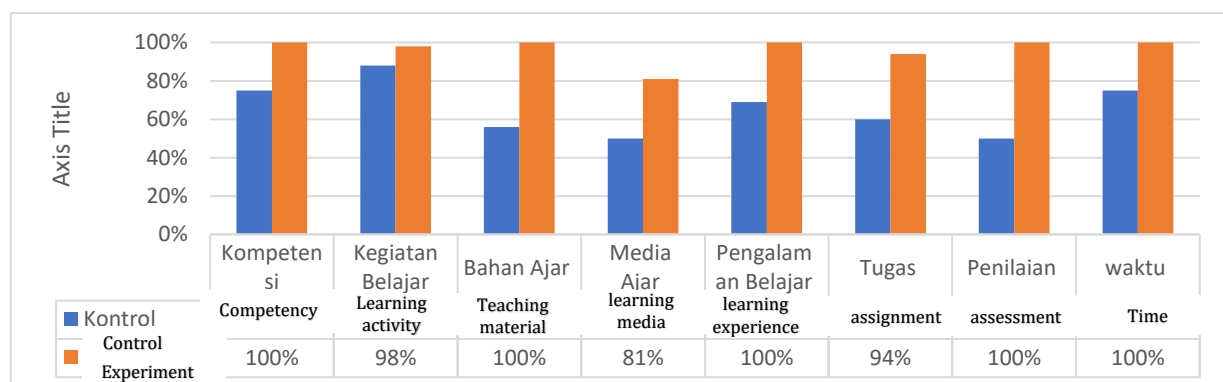


Figure 3. Assessment of the Practicalization of Islamic RPS

Observation of the practicability of the Rencana Pembelajaran Semester (RPS) revealed that the experimental group outperformed the control group across all aspects of learning activities. The results of the observations indicate significant differences between the two groups. In terms of competency attainment, the experimental group achieved a perfect score of 100%, while the control group lagged behind at 75%. Similarly, learning activities in the experimental group were far more effective, with a score of 98%, compared to just 80% for the control group. The quality of teaching materials and media was also significantly better in the experimental group, reaching 100%, while the control group scored only 56% for teaching materials and 50% for media use. Regarding assignments and assessments, the experimental group again excelled, with scores of 94% for assignments and 100% for assessments, while the control group scored 60% and 50%, respectively. Furthermore, the experimental group demonstrated superior learning experiences and time allocation, both achieving the highest score of 100%, in contrast to the control group, which only reached 69%. These results highlight the effectiveness of the development-based RPS model in enhancing various facets of the learning process, including the achievement of competencies, the quality of learning activities, the use of teaching materials, the effectiveness of assignments and assessments, and the overall learning experience. The experimental group consistently demonstrated higher levels of engagement, better resource utilization, and more efficient time management, underscoring the significant advantages of implementing innovative, development-focused teaching strategies.

These findings underscore the critical role of interactive learning in addressing the evolving needs of students in the digital era. In today's rapidly changing educational landscape, where technological advancements and global challenges require adaptability, traditional learning methods often fall short in equipping students with the necessary skills. The implementation of an Outcome-Based Education (OBE) approach through the development-based Rencana Pembelajaran Semester (RPS) goes beyond simply enhancing academic competence; it fosters a more dynamic and student-centered learning environment. This model encourages active participation, collaboration, and the use of digital tools, which are essential for students to thrive in the modern world. By focusing not only on knowledge acquisition but also on developing critical 21st-century skills such as problem-solving, creativity, and digital literacy, OBE-based RPS ensures that students are better prepared to meet the demands of the workforce. This approach enables students to acquire the competencies needed to succeed in both their professional careers and in navigating the complexities of a digital, interconnected world.

Discussion

The study revealed a significant disparity in student responses between the experimental group, which implemented the development-based Rencana Pembelajaran Semester (RPS), and the control group, which followed the conventional RPS. The experimental group demonstrated a much higher level of engagement and satisfaction, with a positive response score of 96%, in stark contrast to the control group's score of only 67%. This marked difference highlights the superior effectiveness of the development-based learning model in fostering student interest, motivation, and active participation. The experimental group's students were more engaged in the learning process, as evidenced by their higher response rates, which suggest that this model not only captures their attention but also encourages deeper involvement in the learning activities. Furthermore, the development-based RPS appears to be more successful in helping students achieve the competencies expected of them. This outcome underscores the potential of innovative, development-focused teaching strategies to enhance student outcomes and promote a more interactive, student-centered learning environment compared to traditional methods. By aligning learning experiences with students' needs and interests, the development-based approach fosters a more effective and motivating learning atmosphere.

This study offers significant advantages in demonstrating the effectiveness of integrating the development-based Rencana Pembelajaran Semester (RPS) with the Outcome-Based Education (OBE) approach. One of the primary strengths of this research is the seamless combination of technology-rich, project-based learning methods that are designed to enhance both academic competencies and soft skills in students ([Melisa, 2024](#); [Saragih et al., 2016](#)). The integration of digital media within the development-based RPS allows for a more flexible and interactive learning experience, making it easier for students to access teaching materials and engage actively in the learning process. This approach is particularly beneficial for today's learners, especially Generation Z students, who have grown up in a digital environment and often seek learning experiences that are tech-savvy and interactive. Furthermore, the inclusion of the Independent Learning Independent Campus Program (MBKM) serves as an important catalyst for strengthening students' professional skills, preparing them for real-world challenges. The MBKM program's activities, such as internships and community projects, allow students to gain practical experience that complements their academic learning, enhancing their adaptability to various professional environments.

The study contributes valuable insights into improving the curriculum design for Islamic Religious Studies, an area traditionally dominated by memorization-based approaches. By integrating critical thinking, creativity, and real-world applications, the development-based RPS fosters a more holistic education for students, equipping them with the necessary competencies to excel in both their academic and professional lives. Previous research has shown that the integration of OBE in learning, especially in andragogy courses, is effective in improving learning outcomes and alignment with professional demands. This approach, guided by the PDCA cycle, supports continuous improvement and prepares students with relevant skills for the world of work (Hasibuan et al., 2024). Previous research shows that the development of OBE-based RPS with the integration of Mpu Kuturan's character values is feasible to be implemented in the Master of Hindu Education Study Program. This approach not only increases the relevance of the curriculum, but also strengthens students' commitment to academic ethics and increases their involvement in learning. Thus, this model can be innovative in the preparation of higher education curriculum based on learning outcomes and character values (Rai et al., 2024).

However, despite these notable advantages, there are several limitations in this study that must be considered when interpreting the results. One of the primary limitations is the narrow scope of the research, which focused exclusively on a single course, Islamic Religion, within one institution. This limited scope means that the findings may not be directly applicable to other academic disciplines or universities, as different subjects may require distinct teaching approaches and curricula. Additionally, the sample size of the study was relatively small, which may have impacted the robustness and generalizability of the statistical analysis. A larger and more diverse sample could provide a more comprehensive understanding of the impact of the development-based RPS on student outcomes across various contexts. Another key limitation of the study is that it primarily assessed short-term impacts on student engagement and competency achievement. While the results show significant improvements, the study did not explore the long-term sustainability of these outcomes. It remains uncertain whether the benefits of the development-based RPS will persist over time or whether students will continue to experience enhanced learning and professional skills in the future. As such, further research is needed to address these limitations and provide a more holistic view of the long-term effectiveness of this teaching approach.

The implications of these findings are broad and far-reaching, particularly in the context of curriculum development, educational policy, and pedagogical practices. From a curriculum development standpoint, the study strongly supports the adoption of OBE-based RPS across various academic disciplines, especially in courses like Islamic Religion, which can greatly benefit from a more interactive, student-centered approach. By focusing on competency-based learning rather than rote memorization, educators can better prepare students for the professional world, equipping them with the critical thinking, problem-solving, and communication skills needed to succeed in their careers. In terms of educational policy, the integration of MBKM with development-based RPS provides a comprehensive model that can be applied across other fields of study, ensuring that graduates are not only academically prepared but also equipped with the practical, real-world skills necessary for professional success. This model emphasizes the importance of aligning academic learning with industry demands and offers a flexible learning structure that accommodates the diverse needs of students. From a pedagogical perspective, the study encourages educators to embrace more dynamic and engaging teaching strategies that incorporate technology and project-based learning. These methods have been proven to foster better student participation, enhance learning experiences, and provide a deeper understanding of the subject matter.

For future research, it is essential to expand this study to include multiple institutions and a wider range of courses to assess the broader applicability of development-based RPS with the OBE framework. A larger, more diverse sample would offer a more comprehensive understanding of how the development-based approach influences student engagement and competency achievement across different academic contexts. Additionally, conducting longitudinal studies would be highly valuable in evaluating the long-term effects of OBE-based learning on students' career trajectories and professional success. Long-term data would help determine whether the benefits observed in this study are sustained over time and whether students continue to exhibit improved skills and competencies in their careers. Furthermore, future research could explore additional pedagogical strategies, such as the use of gamification, augmented reality, or experiential learning, which could further enhance student engagement and learning outcomes. These innovative teaching methods have the potential to provide even more dynamic and interactive learning experiences. Finally, it is crucial to investigate the challenges and readiness of educators in adopting OBE and MBKM approaches. This research would provide insights into the obstacles teachers may face when implementing these models and highlight the professional development needs required to ensure successful adoption. Providing targeted support and training for educators is essential to ensure the effectiveness of these teaching approaches in diverse educational settings.

In conclusion, while this study offers valuable contributions to the field of education, particularly in integrating technology and project-based learning within the OBE framework, it also highlights several areas for improvement and further exploration. By addressing the limitations of the study and expanding research to include a more diverse range of subjects, institutions, and long-term outcomes, future studies can build on these findings to create a more comprehensive understanding of how development-based RPS can reshape the learning experience. The insights gained from this research have the potential to significantly influence curriculum design, educational policies, and pedagogical practices, making learning more accessible, engaging, and relevant to the needs of modern students.

4. CONCLUSION

The implementation of development-based Semester Learning Plans (RPS) using the Outcome-Based Education (OBE) approach addresses the research problem by providing an innovative learning model that enhances student engagement, motivation, and competency development. This approach integrates project-based and collaborative learning strategies with digital media and the MBKM program, creating a dynamic and relevant educational framework tailored to the needs of the digital era. By emphasizing active participation and outcome-oriented learning, it equips students with the critical thinking, problem-solving, and soft skills required for professional success. The study contributes to advancing curriculum design in higher education, demonstrating that adaptive and interactive learning strategies are essential for preparing students to meet the challenges of a rapidly evolving global landscape.

5. BIBLIOGRAPHY

- Adeshina, A. E. (2024). The Transformative Role of Digital Resources in Teaching and Learning. *Open Journal of Educational Development* (ISSN: 2734-2050), 5(1), 1–9. <https://doi.org/10.52417/ojed.v5i1.520>.
- AlAli, R. (2024). Enhancing 21st Century Skills Through Integrated Stem Education Using Project-Oriented Problem-Based Learning. *Geojournal of Tourism and Geosites*, 53(2), 421–430. <https://doi.org/10.30892/gtg.53205-1217>.
- Alam, A. (2023). From Teacher-Centered To Student-Centered Learning: The Role of Constructivism and Connectivism in Pedagogical Transformation. *Journal of Education*, 11(2), 154–167.
- Alenezi, M., Wardat, S., & Akour, M. (2023). The Need of Integrating Digital Education in Higher Education: Challenges and Opportunities. *Sustainability (Switzerland)*, 15(6), 1–12. <https://doi.org/10.3390/su15064782>.
- Alzubi, A. A., Nazim, M., & Ahamad, J. (2024). Examining the effect of a collaborative learning intervention on EFL students' English learning and social interaction. *Journal of Pedagogical Research*, 8(2), 26–46. <https://doi.org/10.33902/JPR.202425541>.
- Ariya, A. A., Makassar, N., Info, A., & History, A. (2025). Filsafat Pendidikan di Era Globalisasi : Tantangan dan Peluang dalam Konteks Multikultural. *JIIIP-Jurnal Ilmiah Ilmu Pendidikan*, 8. <https://doi.org/https://doi.org/10.54371/jiip.v8i1.6442>.
- Asbari, M., & Nurhayati, W. (2024). Outcomes-Based Education in Indonesian Higher Education: Empowering Students' Learning Competencies. *International Journal of Social and Management Studies*, 5(5), 1–6.
- Begovic Yahya, A. I., Dewanti, R., & Sulistyaningrum, D. (2023). Designing ICT Competences-Integrated Syllabuses of Research Skills Professional Administration Courses. *Journal of World Science*, 2(7), 967–976. <https://doi.org/10.58344/jws.v2i7.351>.
- Bhardwaj, V., Zhang, S., Tan, Y. Q., & Pandey, V. (2025). Redefining learning: student-centered strategies for academic and personal growth. *Frontiers in Education*, 10(February), 1–15. <https://doi.org/10.3389/feduc.2025.1518602>.
- Crosthwaite, C., Cameron, I., Lant, P., & Litster, J. (2006). Balancing Curriculum Processes and Content in a Project Centred Curriculum. In Pursuit of Graduate Attributes. *Education for Chemical Engineers*, 1(1), 39–48. <https://doi.org/10.1205/ece.05002>.
- Dano, G. (2024). Strengthening outcome-based education: Capability approach perspective. *Edukasiana: Jurnal Inovasi Pendidikan*, 3(2), 143–155. <https://doi.org/10.56916/ejip.v3i2.550>.
- Das, A. V., Pensamento, C. D. E., Futuros, C. D. E., & Fazilla, S. (2024). A Ssensing Creative Thinking Competencies Of Pre - Service Teachers Via Project - Based Learning Models. *Conhecimento & Diversidade*, 363–387.
- Ekayana, A. A. G., Parwati, N. N., Agustini, K., & Ratnaya, I. G. (2024). Analyzing The Impact of Project-Based Learning STEAM Flipped Classroom on Computer Architecture and Organization Courses in Higher

- Education. *International Journal on Informatics Visualization*, 8(3), 1436–1444. <https://doi.org/10.62527/joiv.8.3.2540>.
- Faruq, U., & Bakar, M. Y. A. (2025). Pendidikan Sebagai Alat Transformasi Sosial Perspektif Filsafat Ilmu. *Concept: Journal of Social Humanities and Education*, 1. <https://doi.org/https://doi.org/10.55606/concept.v4i1.1759>.
- Febriyanti, E., & Haryanto, H. (2024). The Effectiveness Of Canva Application In Fun English Learning To Improve The Students' English Vocabulary (An Experimental Study For Grade XI Of SMK Balekambang Jepara). *Journal on Education*, 6(4), 19501–19513. <https://doi.org/10.31004/joe.v6i4.5870>.
- Ghaleb, B. D. S. (2024). Effect of Exam-Focused and Teacher-Centered Education Systems on Students' Cognitive and Psychological Competencies. *International Journal of Multidisciplinary Approach Research and Science*, 2(02), 611–631. <https://doi.org/10.59653/ijmars.v2i02.648>.
- Hamzah, Tambak, S., Hamzah, M. L., Purwati, A. A., Irawan, Y., & Umam, M. I. H. (2022). Effectiveness of Blended Learning Model Based on Problem-Based Learning in Islamic Studies Course. *International Journal of Instruction*, 15(2), 775–792. <https://doi.org/10.29333/iji.2022.15242a>.
- Hanna, D. E. (2019). Higher education in an era of digital competition: Emerging organizational models. In *Journal of asynchronous learning networks* (Vol. 2, Issue 1). <https://doi.org/10.24059/OLJ.V2I1.1930>.
- Hasibuan, J., Indria, F., & Harahap, N. (2024). Integrating an Outcome-Based Education (OBE) Framework in Andragogy: A Case Study in the Community Education Department. *AL-ISHLAH: Jurnal Pendidikan*, 16, 4853–4863. <https://doi.org/10.35445/alishlah.v16i4.5377>.
- Himmi, N., Armanto, D., & Amry, Z. (2025). Implementation of Project Based Learning (PjBL) in Mathematics Education: A Systematic Analysis of International Practices and Theoretical Foundations. *Science Insights Education Frontiers*. <https://doi.org/10.15354/sief.25.or699>.
- Hu, Z. (2024). *Exploration and Practice of the Experimental Training System in Finance Courses in the Era of Digital Intelligence* (Issue Icmeim). Atlantis Press International BV. <https://doi.org/10.2991/978-94-6463-568-3>.
- Isaeva, Karasartova, Nazgul, R., Mokliuk, M., Dzunusnalieva, K., & Mirzoeva, K. (2025). Enhancing learning effectiveness through adaptive learning platforms and emerging computer technologies in education. *Jurnal Ilmiah Ilmu Terapan Universitas Jambi*, 9(1), 144–160. <https://doi.org/https://doi.org/10.22437/jiituj.v9i1.37967>.
- Jintalan, J. (2025). Sustainability Education and Critical Thinking in Outcomes-Based Teaching and Learning. *International Journal of Curriculum and Instruction*, 17(2), 453–485.
- Judrah, M., Arjum, A., Haeruddin, & Mustabsyirah. (2024). Peran Guru Pendidikan Agama Islam dalam Pembentukan Karakter Peserta Didik. *Journal of Instructional and Development Researches*, 4(1), 25–37. <https://doi.org/https://doi.org/10.53621/jider.v4i1.282>.
- Kohan, N., Navabi, N., Motlagh, M. K., & Ahmadinia, F. (2024). Designing and evaluating ECG interpretation software for undergraduate nursing students in Iran: a non-equivalent control group pretest-posttest design. *BMC Nursing*, 23(1). <https://doi.org/10.1186/s12912-024-02472-0>.
- Kurniawan, D., Masitoh, S., Bachri, B. S., Wahyuningsih, T., Mulawarman, W. G., & Vebibina, A. (2024). Evaluation of Digital Project Based Blended Learning Model to Improve Students' Critical Thinking and Problem Solving Skills. *Journal of Ecohumanism*, 3(8), 1875–1895. <https://doi.org/10.62754/joe.v3i8.4847>.
- Lama, A. V., Hassan, Z., Oki, S., Chansa, C., Moses, T., & Agoi, A. (2024). Revolutionary Teaching Approaches : Exploring the Educational Landscape in Pakistan via Outcome-Based Education. *Journal of Information Systems and Technology Research*, 3(2), 73–79. <https://doi.org/https://doi.org/10.55537/jistr.v3i2.829>.
- Ma, L., Yan, R., Wang, X., Gao, X., Fan, N., Liu, L., & Kang, H. (2024). Enhancing Surgical Nursing Student Performance: Comparative Study of Simulation-Based Learning and Problem-Based Learning. *Journal of Multidisciplinary Healthcare*, 17, 991–1005. <https://doi.org/10.2147/JMDH.S440333>.
- Makhmudovich, K. M. (2025). The Role Of Learning Outcomes In Ensuring Quality Through The Teaching Of Socio-Humanities In Vocational Education. *American Journal of Advanced Scientific Research*, 2(9), 257–263.
- Melisa, M. (2024). Analisis Kesiapan Guru dalam Menggunakan Teknologi Informasi dan Komunikasi untuk Pembelajaran Kurikulum Merdeka. *Al-Miskawaih: Journal of Science Education*, 3(1), 1–9. <https://journal.centrisism.or.id/index.php/mijose/article/view/304%0Ahttps://journal.centrisism.or.id/index.php/mijose/article/download/304/138>.

- Mohamed Hashim, M. A., Tlemsani, I., & Matthews, R. (2022). Higher education strategy in digital transformation. *Education and Information Technologies*, 27(June 2021), 3171–3195. <https://doi.org/10.1007/s10639-021-10739-1>.
- Ojetunde, S. M., & Ramnarain, U. (2025). Like objects or like subjects? Effects of student–robot interaction (SRI) and mathematical ability on students learning outcomes. *Smart Learning Environments*, 12(1). <https://doi.org/10.1186/s40561-024-00345-2>.
- Pak, K., Polikoff, M. S., Desimone, L. M., & Saldívar García, E. (2020). The Adaptive Challenges of Curriculum Implementation: Insights for Educational Leaders Driving Standards-Based Reform. *AERA Open*, 6(2), 1–15. <https://doi.org/10.1177/2332858420932828>.
- Patiño, A., Ramírez-Montoya, M. S., & Buenestado-Fernández, M. (2023). Active learning and education 4.0 for complex thinking training: analysis of two case studies in open education. *Smart Learning Environments*, 10(1). <https://doi.org/10.1186/s40561-023-00229-x>.
- Rai, N., Pitriani, V., Putu, L., Fitriani, W., & Suseni, K. A. (2024). Transforming Higher Education Curriculum Through OBE- Based Semester Learning Plans Integrated with Mpu Kuturan ' s Ethical Framework. *Indonesian Values and Character Education Journal*, 7, 271–280.
- Roza, M. (2025). Exploring the Impact of Innovative Teaching Methods on Student Engagement and Learning Outcomes : A Phenomenological Case Study in Higher Education Institutions. *EduNesia: Journal of Educational Innovation and Research*, 1(1), 38–47.
- Safiudin, K., & Hayati, N. (2025). Smart Application Creator Educaplay: Interactive Learning of Pancasila Ideology for Grade XI Students. *JAMBORE: Jurnal Analisis Sistem, Problematika Dan Perubahan Pendidikan*, 1(1), 95–118.
- Saragih, B., Dewi, N. R., & Isdianto, M. E. (2016). Innovative Course Lecture In Creative Arts: A Project-Based Learning (PjBL 4.0) Enriching 4CS Competencies. *Journal of English Education and Teaching (JEET)*, 2(1), 89–97.
- Septian, N., & Wibisono, A. (2021). Review Faktor Pembentuk Perilaku Belajar. *Research and Development Journal of Education*, 7(2), 316–329. <https://doi.org/http://dx.doi.org/10.30998/rdje.v7i2.9434>.
- Septian, N., Yoga, A., Dewa, F., & Dalia, A. (2024). Exploratory Factor Analysis Perilaku Belajar Generasi Z dalam Ruang Kuliah Berbasis Studio. *Waca Cipta Ruang*, 10, 74–85.
- Serrano, D. R., Dea-Ayuela, M. A., Gonzalez-Burgos, E., Serrano-Gil, A., & Lalatsa, A. (2019). Technology-enhanced learning in higher education: How to enhance student engagement through blended learning. *European Journal of Education*, 54(2), 273–286. <https://doi.org/10.1111/ejed.12330>.
- Setiawan, S. A. (2024). Tantangan guru pai mengimplementasikan kurikulum merdeka dalam pembelajaran pendidikan agama islam. *Jurnal Inovasi Pendidikan Madrasah Ibtidaiyah*, 3(1), 49–64.
- Spaska, A., Kozub, H., Abylasynova, G., Kozub, V., & Koval, Y. (2025). Evaluation of Innovative Teaching Methods Using Modern Information Technologies. *Jurnal Ilmiah Ilmu Terapan Universitas Jambi*, 9(1), 422–440. <https://doi.org/10.22437/jiituj.v9i1.38107>.
- Sun, Z., & Xu, H. (2024). Research on the Training Mode of Innovative and Practical High-End Talents Based on the OBE Concept. *Education Science and Management*, 2(2), 61–80. <https://doi.org/10.56578/esm020201>.
- Suryanto, A., Aman, Yuliana, L., Purwanto, N. A., Firdaus, F. M., & Fadhli, R. (2024). Context input process product evaluation of hybrid learning practices in Indonesian universities. *International Journal of Evaluation and Research in Education*, 13(1), 475–487. <https://doi.org/10.11591/ijere.v13i1.26588>.
- Wahyugi, R., & Siregar, I. (2025). Optimizing The Development Of Teaching Materials Through The Application Of Competency-Based Learning. *Kiswah Jurnal Of Islamic Studies And Education*, 01(01).
- Wu, Y., Xu, L., & Philbin, S. P. (2023). Evaluating the Role of the Communication Skills of Engineering Students on Employability According to the Outcome-Based Education (OBE) Theory. *Sustainability (Switzerland)*, 15(12). <https://doi.org/10.3390/su15129711>.
- Yuan, Y. (2024). Exploration and practice of innovative teaching system in bioinformatics. *Journal of Modern Educational Theory and Practice*. <https://doi.org/https://doi.org/10.70767/jmetp.v1i3.456>.