

An OBE-Based Digital RPS Tool for Zakat and Waqf Management Study Program

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ABSTRACT

Curriculum reform in Indonesian higher education has emphasized the adoption of Outcome-Based Education (OBE); however, its implementation at the course level remains challenging. In the Zakat and Waqf Management Study Program at IAIN Kudus, Semester Learning Plans (Rencana Pembelajaran Semester/RPS) are still prepared using the KKNI framework, creating a gap between the formally adopted OBE curriculum and instructional practice. Previous digital RPS systems have primarily focused on administrative documentation and have not adequately supported pedagogical alignment under OBE. This study aims to design, develop, and evaluate an OBE-based digital tool to support RPS preparation in the Zakat and Waqf Management program. Using a Research and Development approach, data were collected through interviews and questionnaires to identify user needs and evaluate system effectiveness. The findings show that 61% of lecturers expressed a clear need for a digital tool, and the developed system achieved an effectiveness level of 75%, indicated by reduced preparation time and improved consistency in OBE-based RPS development. The novelty of this study lies in the integration of automatic CPL–CPMK–Assessment mapping, which directly addresses a key gap in previous systems. The results demonstrate that the proposed digital tool provides an effective and practical solution for strengthening curriculum alignment and improving the quality of RPS preparation.

Keywords: Digital Tool, Outcome-Based Education, RPS Development, Visual Basic, Zakat and Waqf Management

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INTRODUCTION

The Zakat and Waqf Management Study Program at IAIN Kudus has formally adopted an Outcome-Based Education (OBE) curriculum in response to national higher education reforms. However, the preparation of Semester Learning Plans in the program still follows the Indonesian Qualification Framework (KKNI) structure, resulting in a misalignment between curriculum policy and instructional practice (Junaidi, 2020; Syafarina & Setiawan, 2019). This condition creates difficulties in aligning learning outcomes, learning activities, and assessment strategies at the course level (Baharun, 2017). As a result, lecturers often rely on outdated RPS templates that do not fully reflect OBE principles (Sumartono & Santoso, 2019; Setiabudi & Ismi, 2025). These challenges highlight the need for a more structured and outcome-oriented approach to RPS preparation within the program (J et al., 2024).

Outcome-Based Education emphasizes measurable learning outcomes and constructive alignment among program learning outcomes (CPL), course learning outcomes (CPMK), learning activities, and assessment components (Biggs & Tang, 2011; Harden, 2002). In Indonesia, OBE implementation is reinforced by the National Standards for Higher Education (SN-Dikti), particularly Ministerial Regulation No. 3 of 2020 under the Merdeka Belajar–Kampus Merdeka (MBKM) framework (Junaidi, 2020). The effectiveness of OBE implementation is highly dependent on the quality of course planning documents, such as the RPS, which operationalize learning outcomes into instructional activities (Fink, 2013; Alqahtani & Rajkhan, 2020). A well-designed RPS ensures transparency, consistency, and coherence in the learning process (Hidayati et al., 2025). Without such documents, the intended objectives of OBE cannot be optimally achieved (Markus Deli Girik Allo et al., 2024).

Despite strong policy support and growing theoretical clarity regarding Outcome-Based Education, empirical studies indicate that lecturers often experience difficulties in implementing OBE at the course level (Benavides et al., 2020). These challenges include limited lecturer readiness, incomplete curriculum documents, and difficulties in applying constructive alignment in instructional planning (Mufanti, Carter, & England, 2024; Handayani, Wibowo, Christiani, & Ulkhaq, 2024; Novrizal & Muhammad, 2025). In response to these challenges, several studies have developed digital RPS management systems to support lecturers in preparing instructional documents (Adilah, Hadjaratie, & Yusuf, 2022; Budi Yanto & Rika Perma Sari, 2019; Syafarina & Setiawan, 2019). However, most existing systems primarily focus on administrative functions such as documentation and data storage, rather than addressing the pedagogical alignment required by OBE (Al-Fraihat, Joy, Masa'deh, & Sinclair, 2020; Mckenney, Kali, Markauskaite, & Voogt, 2015). In particular, they do not provide automated mechanisms to align program learning outcomes (CPL), course learning outcomes (CPMK), learning activities, and assessment components, indicating a clear research gap in digital support for OBE-based instructional planning (Gil-Jaurena & Softic, 2016; Ifenthaler & Yau, 2020).

These challenges are present in the Zakat and Waqf Management Study Program at IAIN Kudus. Although the program has formally adopted OBE,

lecturers continue to rely on conventional KKNi-based Semester Learning Plan (RPS) templates. This misalignment creates inconsistencies in learning outcome formulation, weekly learning structures, and assessment strategies (Souto-Romero et al., 2024). Incomplete curriculum documents further impede lecturers' ability to prepare coherent and OBE-aligned RPS, leading to variations in instructional quality across courses (Rini, Yuhana, Fathurrohman, & Muhyidin, 2023; Jaya, Saputri, Budiyanto, & Mujahidah, 2025).

Previous studies have attempted to develop digital RPS management systems (Adilah, Hadjaratie, & Yusuf, 2022; Budi Yanto & Rika Perma Sari, 2019; Syafarina & Setiawan, 2019; Aziira, Kamil, & Kartika, 2023). However, these systems primarily focus on documentation, data entry, and administrative monitoring rather than solving the core pedagogical challenge of aligning CPL-CPMK learning activities assessment. None provides automated OBE-based mapping features or addresses the specific needs of study programs transitioning from KKNi to OBE (Aziira et al., 2023). Thus, a research gap remains in developing an integrated digital solution that supports lecturers in preparing standardized, consistent, and OBE-aligned RPS.

To address this gap, this study aims to design, develop, and evaluate an OBE-based digital tool for RPS preparation in the Zakat and Waqf Management Study Program at IAIN Kudus. The study employs a Research and Development (R&D) approach to ensure systematic product design, testing, and refinement (Sugiyono, 2021; Plomp & Nieveen, 2013). The proposed digital tool integrates automated CPL-CPMK-assessment mapping to strengthen constructive alignment and improve curriculum coherence (Sánchez-Cruzado et al., 2021). This feature represents the main novelty of the study, as it directly addresses a key difficulty in OBE implementation identified in previous research. Through this approach, the study offers a practical and effective solution to enhance the quality and consistency of RPS development (Sirojuddin Abror & Tsedis Robert Makoelle, 2025).

METHOD

This study is grounded in a pragmatic research paradigm, which emphasizes practical problem-solving and the selection of research methods that best address real-world issues (McKenney & Reeves, 2019). The pragmatic paradigm is widely applied in educational technology research because it allows the integration of qualitative and quantitative data to support the development and evaluation of instructional products (J W Creswell & Creswell, 2022; Sekaran, 2003). In this study, the paradigm is appropriate for addressing the practical challenge of aligning OBE curriculum requirements with RPS preparation practices in the Zakat and Waqf Management Study Program at IAIN Kudus.

This research employed a Research and Development (R&D) approach to design, develop, and evaluate an OBE-based digital tool for preparing Semester Learning Plans (RPS). The R&D method is recommended when the objective of the study is to produce and validate an educational product through systematic stages of development and evaluation (Sugiyono, 2021; Plomp & Nieveen, 2013). This approach enables iterative refinement of the product based on user feedback and

empirical testing. The research participants consisted of 19 lecturers from the Zakat and Waqf Management Study Program at IAIN Kudus. Participants were selected using purposive sampling, as they are directly involved in preparing RPS documents and implementing OBE at the course level. Purposive sampling is appropriate when participants possess specific knowledge and experience relevant to the research objectives (Etikan, 2016; J W Creswell & Creswell, 2022).

The development process followed the Software Development Life Cycle (SDLC) model, which provides a structured framework for software development through sequential stages (Pressman & Maxim, 2019; Sommerville, 2016). The SDLC stages applied in this study included needs analysis, design, implementation, and evaluation. This model was selected to ensure that the digital tool was developed systematically and aligned with user requirements identified during the needs analysis stage. Data were collected using interviews and questionnaires to obtain both qualitative and quantitative information. Interviews were conducted to explore lecturers' experiences and challenges in preparing OBE-aligned RPS, while questionnaires were used to measure user needs and system effectiveness. The use of mixed data collection techniques is common in R&D studies to provide comprehensive insights into user perceptions and system performance (J W Creswell & Creswell, 2022; Plomp & Nieveen, 2013).

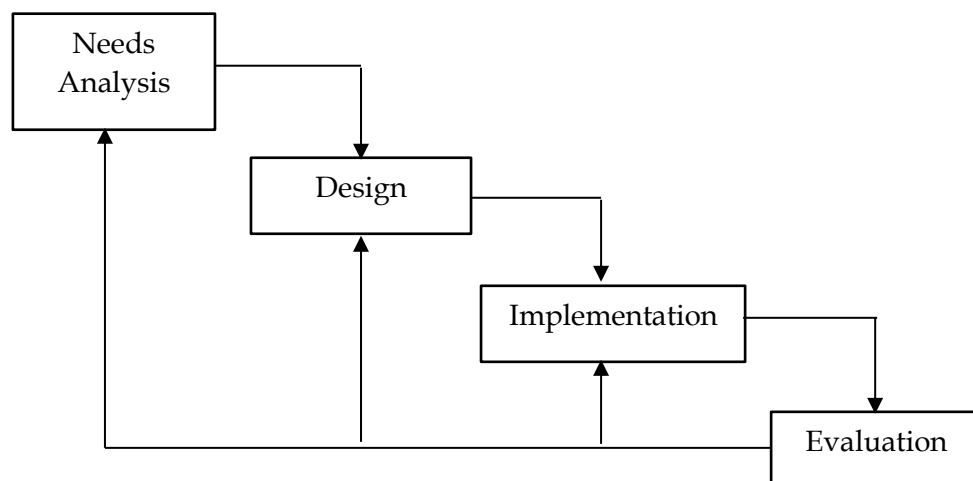


Figure 1. SDLC Model

Needs Analysis

Data were collected through questionnaires, interviews, document analysis, and literature review relevant to system development. The analysis focused on identifying software functional requirements based on user needs.

Design

In this stage, the functional requirements were translated into system and process designs for the application.

Implementation

The RPS management system was developed as a web-based application. After implementation, black-box testing ensured all functional requirements and outputs aligned with user needs.

Evaluation

Feedback was collected from users to assess whether the developed product met the intended objectives and performance criteria.

RESULTS AND DISCUSSION

RESULT

Needs Analysis

A needs analysis was conducted through interviews and a questionnaire distributed to 19 lecturers in the Zakat and Waqf Management Study Program. The results showed a significant gap between the availability of the conventional RPS template and lecturers' satisfaction with its functionality. To provide a clearer overview, the complete questionnaire results are presented below:

Table 1. Questionnaire Results for Needs Analysis

Statement	Strongly Agree	Agree	Neutral	Disagree	Strongly Disagree
I agree with preparing RPS using the conventional method	0	14	3	2	0
I'm satisfied with the existing RPS template	0	0	4	11	4
The existing RPS template is sufficient to help me prepare the RPS	0	1	2	8	8
I need an application to support RPS preparation	15	3	1	0	0
The RPS template needs to be supported with technology	9	10	0	0	0

The table shows that the need for technological support is extremely strong, with 95% agreeing or strongly agreeing that an RPS application is required, and 100% recognizing the need for integrating technology with the existing template. These results demonstrate an urgent need for a digital system that can support constructive alignment, improve template consistency, and reduce lecturer workload. This aligns with the constructive alignment theory, which emphasizes the importance of linking outcomes, learning activities, and assessments in OBE-based curriculum design (Biggs & Tang, 2011).

The results presented in this section elaborate on the key findings summarized in the abstract, particularly lecturers' needs for an OBE-based digital tool and the effectiveness of the developed system. The needs analysis shows that although 74% of lecturers acknowledge the existence of the conventional RPS template, more than half (58%) express dissatisfaction with it. This gap between availability and satisfaction indicates that the existing template fulfills administrative requirements but fails to meet pedagogical and curriculum alignment needs. Furthermore, the finding that 42% believe the conventional RPS does not significantly contribute to the learning process suggests that the template functions more as a compliance document rather than a meaningful instructional guide.

The high percentage of lecturers (79%) who strongly agree on the need for an RPS application reflects not merely a desire for digitization but a demand for a system that supports curriculum coherence, OBE alignment, and workflow efficiency. Meanwhile, the finding that 53% consider the existing RPS useful only as a reference implies that lecturers value certain elements of the old system but require substantial improvements to meet current curriculum demands. The 61% who explicitly indicate the need for a new RPS application demonstrate that dissatisfaction is not incidental—it reflects a structural issue within the program’s curriculum documentation practices. Together, these findings indicate that the existing manual RPS process does not support the principles of constructive alignment (Biggs & Tang, 2011), a core requirement of OBE. Thus, the development of a digital RPS system is not only a practical necessity but also a pedagogical imperative.

Design Stage

At this stage, the system design and database structure were created. The design was based on models by previous researchers (Syafarina & Setiawan, 2019). It included context diagrams and database structures to visualize system workflow.

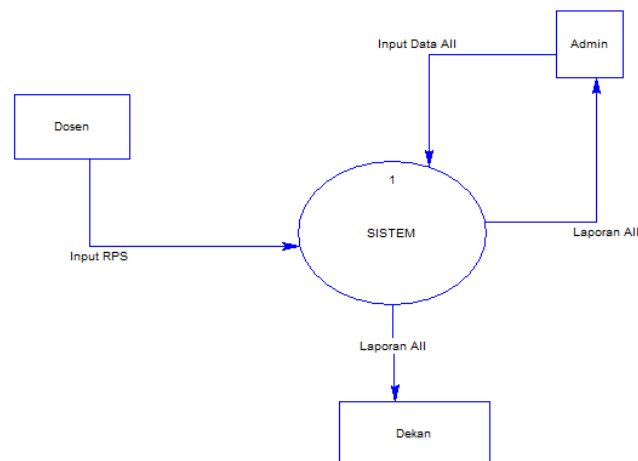


Figure 2. Context Diagrams

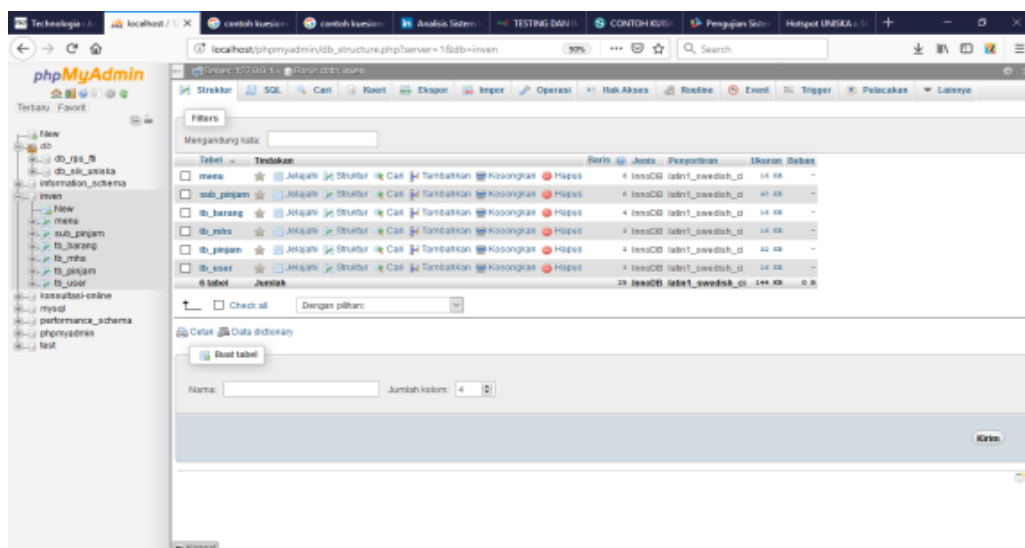


Figure 3. Database (Syafarina & Setiawan, 2019)

Based on the needs analysis, the system architecture and database structure were designed to support OBE-based RPS preparation. The design outputs included context diagrams, data flow diagrams, and a database schema that integrates key RPS components, namely program learning outcomes (CPL), course learning outcomes (CPMK), learning activities, assessment components, and weekly learning plans. These design components were structured to ensure systematic data flow and consistency across RPS elements.

Implementation Stage

The implementation stage resulted in a web-based digital tool for RPS preparation. The system includes several main features: user authentication (login), course and RPS data management, CPL and CPMK management, automated CPL–CPMK–assessment mapping, weekly learning planning, and RPS document generation in PDF format. All features were developed in accordance with the predefined system design and functioned as intended during initial testing. The developed system is a web-based RPS application for managing RPS data. The main features include:

Login Page

The login page is the first interface that lecturers will interact with when accessing the Semester Learning Plan (RPS) management system. Lecturers are required to enter their username and password to proceed to the list of Semester Learning Plans (RPS). The login page is illustrated as follows:

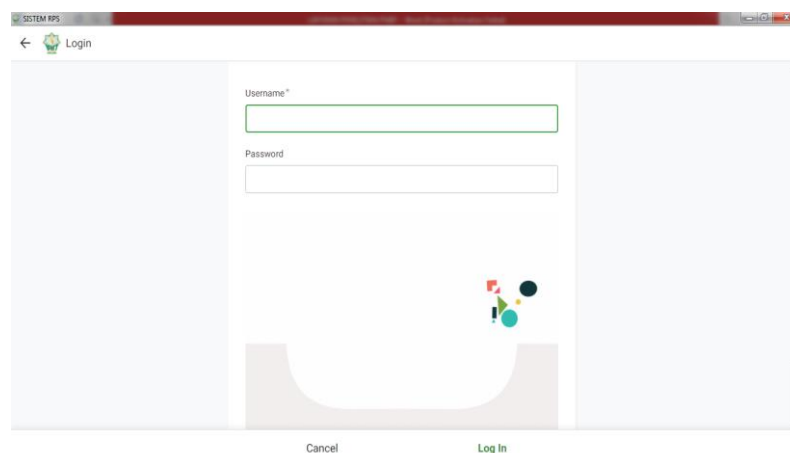


Figure 4. Login Page

Course List Page

This page lists Semester Learning Plans (RPS) created by the lecturers. On this page, lecturers can create a new RPS and view, edit, or delete previously added RPS documents. The List of Semester Learning Plans (RPS) page can be seen in the following figure:

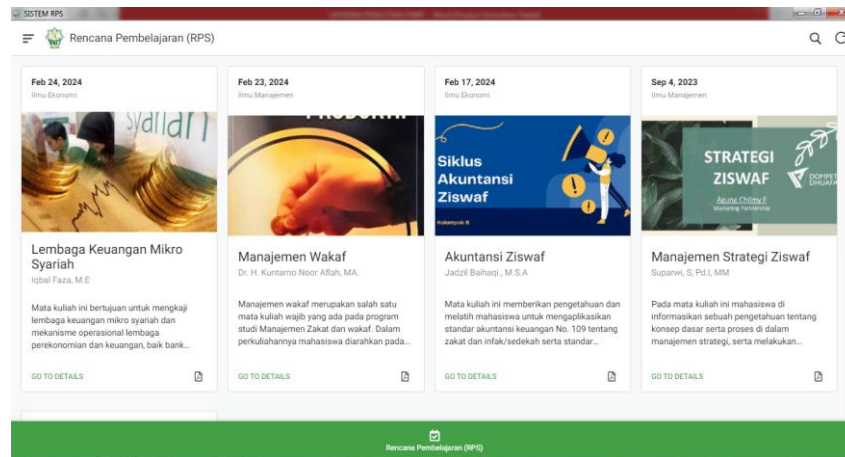


Figure 5. Course List Page

Add/Edit Semester Learning Plan (RPS) page

This page allows lecturers to create a new RPS or modify an existing one. On this page, lecturers can enter or update essential information, including course identity, learning outcomes, learning materials, learning methods, assessment techniques, and references. Once completed, the data will be saved and automatically stored in the system database. The Add/Edit Semester Learning Plan (RPS) page is shown as follows:

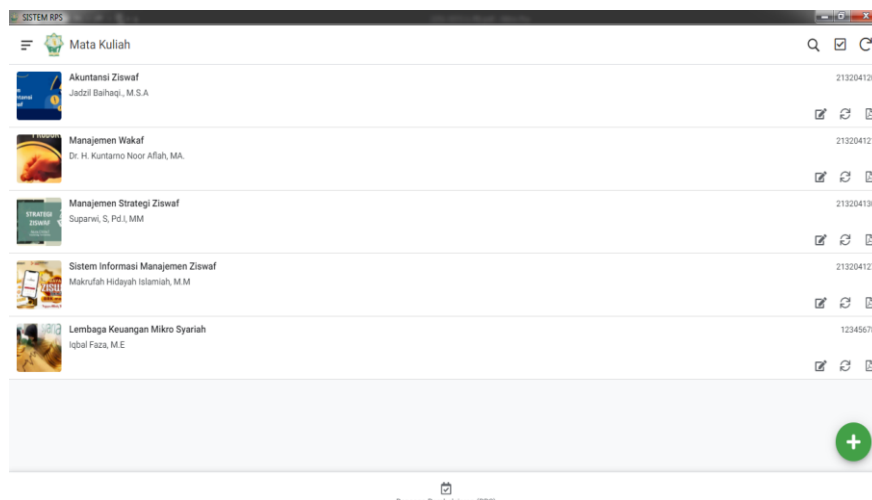


Figure 6. List of RPS

RPS Details Page

This page displays the details of each Semester Learning Plan (RPS) created. To access this page, users must click on the desired course title listed on the RPS List page. On this page, lecturers can add, update, or delete various RPS components, including Course Learning Outcomes (CLOs), References, Assessment Components, and Weekly Meetings. The Detail Semester Learning Plan (RPS) page is illustrated in Figure 7.

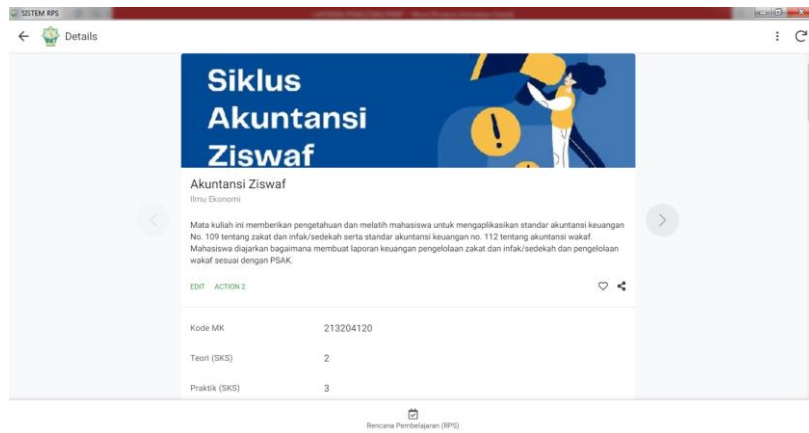


Figure 7. RPS Details Page

Learning Outcomes (CPL) List Page

Learning Outcomes (CPL) List Page displays a compilation of all defined learning outcomes expected to be achieved by students upon completing the study program. On this page, lecturers or administrators can add new CPL entries, edit existing ones, or delete those that are no longer relevant. Each CPL is typically categorized based on knowledge, skills, and attitudes to ensure alignment with the program's curriculum. Learning Outcomes (CPL) List Page is illustrated as follows:

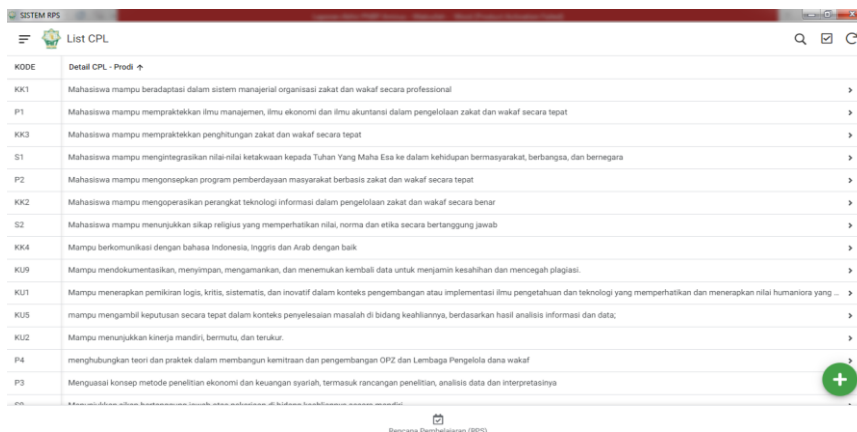


Figure 8. List of Learning Outcomes (CPL)

Add/Edit Course Learning Outcomes (CPMK) Page

The Add/Edit Course Learning Outcomes (CPMK) Page is used to create or update CPMK entries and can be accessed by clicking the Add/Edit button in the Course Learning Outcomes (CPMK) section on the RPS Detail Page. When creating a new CPMK, the lecturer must select the corresponding Learning Outcome (CPL) that the CPMK supports. This ensures alignment between course-level outcomes and program-level outcomes. The Add CPMK Page is illustrated in the following figure:

KODE	Detail CP-MK
Akuntansi Ziswaf	
M1	Mampu memahami lingkungan akuntansi zakat. (P1)
M2	Mampu membuat Laporan Keuangan pengelolaan zakat. (S2, KK1, KK3)
M3	Mampu memahami lingkungan akuntansi wakaf. (P1)
M4	Mampu membuat Laporan Keuangan pengelolaan wakaf. (S2, KK1, KK3)
Lembaga Keuangan Mikro Syariah	
M1	Mahasiswa mampu menjelaskan teori keuangan syariah
M2	Mahasiswa mampu menjelaskan konsep dasar lembaga keuangan mikro syariah
M3	Mahasiswa mampu memahami teknis operasional lembaga keuangan BPR berbasis syariah
M4	Mahasiswa mampu memahami teknis operasional beberapa lembaga keuangan non bank berbasis syariah (operasi syariah, BMT)
M5	Mahasiswa mampu memahami teknis operasional lembaga keuangan mikro syariah dalam mengelola social fund (zakat dan wakaf)
Manajemen Strategi Ziswaf	
M1	Mahasiswa mampu menjelaskan konsep dasar manajemen strategis
M2	Mahasiswa mampu memumuskan Visi, Misi dan makna filosofis perusahaan

Figure 9. List of Course Learning Outcomes (CPMK)

References Page

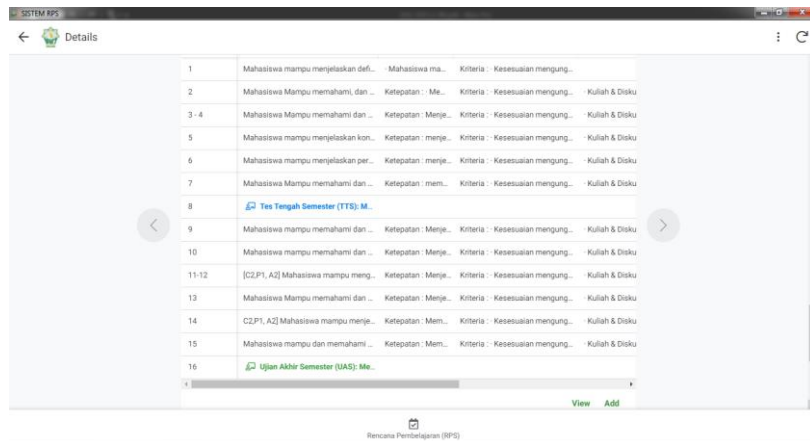
The Add/Edit References Page is used to add or update reference materials and can be accessed by clicking the Add/Edit button in the References section on the RPS Detail Page. On this page, lecturers can enter details such as the title, author, publication year, and reference type (e.g., books, journals, or online sources). The Add Reference Page is illustrated in Figure 10 below:

Mata Kuliah
All
Akuntansi Ziswaf
Lembaga Keuangan Mikro Syariah
Manajemen Strategi Ziswaf
Manajemen Wakaf
Sistem Informasi Manajemen Ziswaf

Figure 10. References Page

Weekly Meetings Page

The Add/Edit Weekly Meetings Page is used to add or update weekly meeting data and can be accessed by clicking the Add/Edit button in the Weekly Meetings section on the RPS Detail Page. On this page, the CPMK components, references, and assessment elements are automatically populated based on the information previously entered in each respective section. The Add Weekly Meeting Page is illustrated in the following figure:

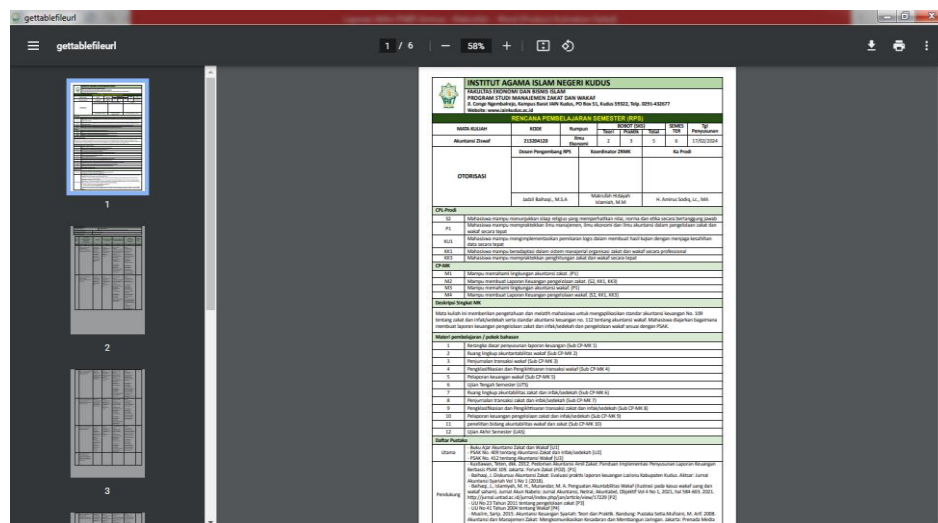


No	Keterangan	Kriteria	Kesuksesan	Mengukur	Kuliah & Disku
1	Mahasiswa mampu menjelaskan def...	Mahasiswa ma...	Kriteria : Kesuksesan meng...		
2	Mahasiswa Mampu memahami, dan ...	Ketepatan : Me...	Kriteria : Kesuksesan meng...		
3 - 4	Mahasiswa Mampu memahami dan ...	Ketepatan : Menje...	Kriteria : Kesuksesan meng...		
5	Mahasiswa mampu menjelaskan kon...	Ketepatan : menje...	Kriteria : Kesuksesan meng...		
6	Mahasiswa mampu menjelaskan per...	Ketepatan : menje...	Kriteria : Kesuksesan meng...		
7	Mahasiswa Mampu memahami dan ...	Ketepatan : mem...	Kriteria : Kesuksesan meng...		
8	Tes Tengah Semester (TTS) M...				
9	Mahasiswa mampu memahami dan ...	Ketepatan : Menje...	Kriteria : Kesuksesan meng...		
10	Mahasiswa mampu memahami dan ...	Ketepatan : Menje...	Kriteria : Kesuksesan meng...		
11-12	[CZP1, A2] Mahasiswa mampu meng...	Ketepatan : Menje...	Kriteria : Kesuksesan meng...		
13	Mahasiswa Mampu memahami dan ...	Ketepatan : Menje...	Kriteria : Kesuksesan meng...		
14	CZP1, A2] Mahasiswa mampu menje...	Ketepatan : Mem...	Kriteria : Kesuksesan meng...		
15	Mahasiswa mampu dan memahami ...	Ketepatan : Mem...	Kriteria : Kesuksesan meng...		
16	Ujian Akhir Semester (UAS) Me...				

Figure 11. Meeting Details

Print Page

This page contains all the data entered by the user (lecturer) in accordance with the Semester Learning Plan (RPS) template. The file is presented in PDF format, which will later be reviewed by the administrator for approval and signature before being stored in the Study Program's database.



RENCANA PEMBELAJARAN SEMESTER (RPS)					
No	Keterangan	Kriteria	Kesuksesan	Mengukur	Kuliah & Disku
1	Mahasiswa mampu menjelaskan def...	Mahasiswa ma...	Kriteria : Kesuksesan meng...		
2	Mahasiswa Mampu memahami, dan ...	Ketepatan : Me...	Kriteria : Kesuksesan meng...		
3 - 4	Mahasiswa Mampu memahami dan ...	Ketepatan : Menje...	Kriteria : Kesuksesan meng...		
5	Mahasiswa mampu menjelaskan kon...	Ketepatan : menje...	Kriteria : Kesuksesan meng...		
6	Mahasiswa mampu menjelaskan per...	Ketepatan : menje...	Kriteria : Kesuksesan meng...		
7	Mahasiswa Mampu memahami dan ...	Ketepatan : mem...	Kriteria : Kesuksesan meng...		
8	Tes Tengah Semester (TTS) M...				
9	Mahasiswa mampu memahami dan ...	Ketepatan : Menje...	Kriteria : Kesuksesan meng...		
10	Mahasiswa mampu memahami dan ...	Ketepatan : Menje...	Kriteria : Kesuksesan meng...		
11-12	[CZP1, A2] Mahasiswa mampu meng...	Ketepatan : Menje...	Kriteria : Kesuksesan meng...		
13	Mahasiswa Mampu memahami dan ...	Ketepatan : Menje...	Kriteria : Kesuksesan meng...		
14	CZP1, A2] Mahasiswa mampu menje...	Ketepatan : Mem...	Kriteria : Kesuksesan meng...		
15	Mahasiswa mampu dan memahami ...	Ketepatan : Mem...	Kriteria : Kesuksesan meng...		
16	Ujian Akhir Semester (UAS) Me...				

Figure 12. Print of RPS

Evaluation Stage

The final stage in the development of the Semester Learning Plan (RPS) application is the evaluation stage. In the Software Development Life Cycle (SDLC), the evaluation phase assesses the quality and performance of the application after development is complete. This evaluation is essential to ensure that the application meets the previously defined specifications and user requirements. The process helps the team identify the application's strengths and weaknesses, providing valuable insights for further improvements. By conducting a comprehensive evaluation, the organization can enhance user satisfaction and the application's overall effectiveness. One of the main components of the evaluation stage is functional testing. In this phase, the testing team conducts a series of tests to ensure that all application features function as expected. This testing involves using real-world scenarios to examine user interactions with the

application. Each functionality is tested to ensure there are no bugs or issues that could hinder users from completing their tasks. The results of this testing provide valuable insights into whether the application is ready for deployment. After testing the application, several lecturers reported that it was highly helpful. The effectiveness level of using this application reached 75%. Lecturers found that the time required to prepare the Semester Learning Plan (RPS) was significantly shorter compared to the conventional method. In addition, further development of this application is still needed so that it can be used not only for the Zakat and Waqf Management Study Program but also by the faculty and even the entire University.

DISCUSSION

The first important finding of this study is the strong need for a digital tool to support OBE-based RPS preparation, as indicated by 61% of lecturers who expressed dissatisfaction with the continued use of KKNI-based templates. This finding confirms previous studies reporting that lecturers often experience difficulties in translating OBE principles into course-level instructional documents due to limited readiness and inadequate support systems (Mufanti et al., 2024; Handayani et al., 2024). From an OBE perspective, this condition reflects a persistent gap between curriculum policy and instructional practice (Nurhikmah, Nursalam, Eko Prayetno, 2024). The key insight from this finding is that successful OBE implementation requires not only policy adoption but also practical instructional tools that operationalize alignment at the course level.

The second key finding relates to the design and implementation of the digital tool, particularly the integration of automatic CPL–CPMK–assessment mapping. Unlike previous digital RPS systems that primarily function as administrative repositories (Adilah, Hadjaratie, & Yusuf, 2022; Budi Yanto & Rika Perma Sari, 2019; Syafarina & Setiawan, 2019), the developed system embeds constructive alignment directly into the RPS preparation process. This feature aligns with OBE theory, which emphasizes coherence between learning outcomes, learning activities, and assessment strategies as the foundation of effective learning design (Biggs & Tang, 2011). The main insight here is that automatic mapping transforms the RPS from a static administrative document into a pedagogical instrument that actively guides lecturers in implementing OBE.

Another important finding is the effectiveness level of 75%, indicating that the digital tool improves efficiency and consistency in RPS preparation. This result supports previous research showing that educational information systems can reduce administrative workload and enhance curriculum documentation quality (Sumartono & Santoso, 2019). However, beyond efficiency, the effectiveness result demonstrates that embedding alignment logic into the system design helps lecturers maintain consistency across learning outcomes and assessments (Tamphu et al., 2024). The key insight derived from this finding is that effectiveness in OBE-oriented digital tools should be understood not only in terms of time efficiency but also in terms of pedagogical consistency and curriculum coherence.

Overall, the findings of this study contribute to the growing body of research on OBE implementation by demonstrating how a technology-driven

alignment mechanism can address a specific instructional gap. The automatic mapping feature represents the primary novelty of this research, as it offers a concrete solution to the challenge of aligning CPL, CPMK, learning activities, and assessment components—an issue that has been widely acknowledged but insufficiently addressed in previous studies. The overarching insight of this study is that integrating alignment logic into digital instructional tools is a critical strategy for bridging the gap between OBE policy and classroom-level implementation, particularly in programs transitioning from KKNI to OBE.

CONCLUSION

This study aimed to design, develop, and evaluate an OBE-based digital tool to support the preparation of Semester Learning Plans (RPS) in the Zakat and Waqf Management Study Program at IAIN Kudus. The findings indicate that these objectives were successfully achieved. The developed digital tool addresses the misalignment between the formally adopted OBE curriculum and the continued use of KKNI-based RPS templates by providing structured guidance for outcome-oriented RPS preparation. The evaluation results, which show an effectiveness level of 75%, demonstrate that the tool effectively supports lecturers in improving efficiency and consistency in preparing OBE-aligned RPS documents. The main contribution of this study lies in the integration of automatic CPL–CPMK–assessment mapping into the RPS preparation process. Unlike previous digital RPS systems that primarily focus on administrative documentation, the proposed tool embeds constructive alignment directly into instructional planning. This contribution extends existing research on OBE implementation by offering a concrete technological solution to a widely recognized but insufficiently addressed challenge operationalizing alignment between learning outcomes, learning activities, and assessments at the course level. The findings highlight the role of digital instructional tools as pedagogical enablers rather than merely administrative systems. Although the results demonstrate the effectiveness of the developed digital tool, this study is limited to a single study program and focuses mainly on lecturers' perceptions and system performance. Future research is recommended to implement and evaluate the tool in different study programs or institutions to examine its broader applicability. Further studies may also integrate the system with learning management systems (LMS) and investigate its impact on student learning outcomes and achievement of learning competencies

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