

Review of the curriculum of the OBE (Outcome Based Education) health study program

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ABSTRACT Implementing outcome-based Education (OBE) in higher education is a strategic approach to ensure that graduates possess competencies aligned with the workforce's needs and scientific development. In the context of Health Study Programs, adopting OBE is crucial to ensure that graduates can deliver safe, effective, and outcome-oriented health services. This community service activity aims to comprehensively review the Health Study Program curriculum using the OBE framework, particularly aligning Graduate Learning Outcomes (CPL), Course Learning Outcomes (CPMK), teaching methods, and assessment systems. The activity engages faculty members and study program managers through workshops and focused group discussions (FGDs) facilitated by experts. The review process centers on re-mapping the CPL to graduate profiles and stakeholder needs, constructing a curriculum matrix, and integrating performance-based assessment methods. The expected outcome of this initiative is a more systematic, measurable, and OBE-compliant curriculum document, thereby enhancing institutional readiness for national and international accreditation processes. By adopting an outcome-based curriculum, the educational process within the Health Study Program is expected to become more structured, responsive to the evolving demands of healthcare services, and capable of producing professionally competent and globally competitive graduates.



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1. INTRODUCTION

In the dynamic landscape of higher education, the relevance and responsiveness of academic programs to the evolving needs of society, industry, and global standards have become a critical points of emphasis (Wijayanti et al., 2025). Particularly in health education, where professional competencies directly impact human lives, the demand for outcome-driven, quality-assured learning systems has led to the increasing adoption of the Outcome Based Education (OBE) framework. OBE is a student-centered learning philosophy that measures student performance through specific outcomes, such as knowledge, skills, attitudes, and values that graduates are expected to demonstrate upon program completion (Yu et al., 2024). This paradigm shift from traditional content-based instruction to a results-oriented system offers a

strategic avenue for ensuring accountability, clarity of learning goals, and continuous improvement (Turner, 2025).

The primary premise of OBE is that every component of the academic process, from curriculum design to learning methods and assessment strategies, must align with clearly defined outcomes. In health study programs, this alignment is crucial due to the professional, ethical, and technical standards required in clinical and community health practice (Lin et al., 2025). Graduates must possess theoretical knowledge and demonstrate the ability to apply it in real-life, high-stakes situations. Therefore, the curriculum development process must be meticulously structured to ensure that the educational experience prepares students to meet the competencies expected by the profession and broader society. One of the most critical components of the OBE model is the formulation of Program Learning Outcomes (PLOs) or *Capaian Pembelajaran Lulusan* (CPL) (Yao et al., 2025). These outcomes act as a foundation upon which the curriculum is developed, ensuring that every course, activity, and assessment is purposefully linked to the end goals of the program. In addition to PLOs, each course must have its own Course Learning Outcomes (CLOs) or CPMK, which are directly mapped to the PLOs. Through this structured mapping known as curriculum alignment or curriculum mapping—institutions can evaluate the sufficiency, relevance, and coherence of the learning experiences offered to students (McMullen et al., 2023).

The implementation of OBE in health education has been strongly encouraged by national accreditation bodies such as LAM-PTKs in Indonesia, as well as international frameworks such as the ASEAN University Network Quality Assurance (AUN-QA) and the Washington Accord (Wang et al., 2025). These agencies emphasize a curriculum that is competency-based, integrative, and aligned with the needs of stakeholders, including healthcare employers, patients, policymakers, and the broader community. Therefore, institutions offering health programs must increasingly revise their curricula to meet OBE principles, not merely as a compliance measure but as an academic strategy to produce competent, ethical, and globally competitive graduates (Licas & Torres, 2024).

Despite the recognized importance of OBE, many higher education institutions, especially in developing countries, face challenges in translating the theory into practice (Huang et al., 2024). These challenges may include a lack of understanding of OBE concepts among academic staff, insufficient training in learning outcomes formulation, unclear differentiation between knowledge-based and competency-based approaches, and a lack of standardized methods for assessing student outcomes. Furthermore, many study programs rely heavily on input-based indicators such as teaching hours and course content rather than output indicators such as student capabilities, professional readiness, or societal impact (Luo et al., 2024).

In this regard, reviewing the existing curriculum of health study programs becomes necessary and urgent. A curriculum review based on OBE involves more than simply reorganizing subjects or updating content. It requires a systemic analysis

of whether the current curriculum design enables the achievement of intended learning outcomes. It includes evaluating whether teaching methods are active and student-centered, whether assessments are authentic and competency-based, and whether learning experiences are relevant to real-world contexts. Additionally, stakeholder input must be considered to ensure the curriculum is socially accountable and responsive to healthcare trends and demands (Nagpal et al., 2023).

The community service activity described in this paper focuses on conducting a comprehensive curriculum review for a health study program in accordance with OBE principles. The activity involves structured workshops, collaborative discussions, and technical mentoring sessions involving academic staff, curriculum developers, and internal quality assurance units. Several key steps guide the review process: (1) re-examining the graduate profile and PLOs; (2) revisiting and reconstructing CLOs for each course; (3) establishing or updating curriculum matrices to ensure mapping accuracy; and (4) aligning learning strategies and assessment tools with expected outcomes.

Moreover, this curriculum review initiative aligns with the broader goals of educational transformation in the 21st century, where institutions are expected to cultivate graduates who are critical thinkers, adaptive professionals, ethical practitioners, and lifelong learners. The healthcare sector's challenges, including technological advancements, pandemic preparedness, health inequities, and interdisciplinary collaboration, require academic programs to be future-ready and evidence-driven. Therefore, embedding OBE in curriculum structures is a strategic response to ensure that health graduates can function effectively in complex, uncertain, and evolving environments. Implementing OBE in health study programs is critical in advancing higher education's quality, relevance, and impact. A thorough curriculum review guided by OBE principles is an academic exercise and a form of institutional introspection and innovation. It reflects a proactive commitment to excellence, ensuring that the education delivered is not merely content-rich but outcome-effective. This initiative aspires to contribute meaningfully to the ongoing discourse and practice of quality health education in Indonesia and beyond through structured, participatory, and reflective processes.

2. METHOD

The curriculum review activity of the Health Study Program based on Outcome Based Education (OBE) was carried out using a participatory and collaborative approach that emphasizes active involvement from lecturers, curriculum developers, quality assurance teams, and other key stakeholders. The implementation strategy is designed to be systematic and iterative, ensuring that each stage of the review process aligns with OBE principles and institutional academic standards.

Preparation Phase

In this initial stage, coordination was conducted with the study program management to determine the curriculum review's scope, focus areas, and expected outcomes. Key steps include:

Needs assessment: Identification of challenges in the current curriculum implementation and stakeholder expectations.

Document collection: Gathering existing curriculum documents, including graduate profiles, CPL (Program Learning Outcomes), CPMK (Course Learning Outcomes), syllabus, curriculum matrices, and assessment rubrics.

Formation of a curriculum review team Composed of internal lecturers, curriculum committee members, and external facilitators experienced in OBE-based curriculum development.

Workshop and Capacity Building

A series of technical workshops were conducted to enhance participants' understanding of key OBE concepts and practices. The workshop topics included:

Introduction to OBE and its application in health education.

Formulating CPL and CPMK according to Bloom's Taxonomy and national qualification frameworks.

Techniques for curriculum mapping (constructive alignment between CPL, CPMK, teaching methods, and assessment).

Designing assessment tools that measure learning outcomes and competencies.

These workshops were delivered in a blended learning format, combining in-person sessions and guided assignments to support independent learning and reflection.

Focus Group Discussion (FGD)

Following the workshops, a Focus Group Discussion was held to review and revise the CPL and CPMK formulations based on the current graduate profile and healthcare demands. This stage involved:

Collaborative review of CPL-CPL mapping to ensure internal consistency and relevance.

Critical discussion on redundancy, gaps, and overlaps among learning outcomes.

Input from external stakeholders such as clinical supervisors, alumni, and professional associations (if available).

The FGD encouraged peer feedback and fostered shared ownership of the curriculum renewal process among lecturers.

Curriculum Mapping and Revision

The next stage focused on constructing or updating the curriculum matrix, ensuring all courses aligned appropriately with the intended outcomes. Activities included:

Mapping of each course's CPMK to the CPL.

Identify teaching and learning strategies that support outcome achievement (e.g., case-based learning, problem-based learning).

Designing assessment methods aligned with the levels of learning outcomes (e.g., written tests, OSCE, portfolios, practical exams).

This process used curriculum mapping tools and templates based on standards from LAM-PTKs, KKNi, and relevant international references.

Validation and Documentation

Once the revised curriculum documents were finalized, a validation session involving curriculum experts and academic reviewers was conducted. Their role was to:

Ensure compliance with national higher education standards.

Assess the clarity, coherence, and measurability of learning outcomes.

Provide recommendations for final adjustments.

The final documents include the updated curriculum structure, CPL-CPMK matrix, lesson plans (RPS), and assessment rubrics.

Follow-up and Monitoring Plan

As part of the sustainability plan, the program outlined:

Recommendations for continuous improvement and monitoring.

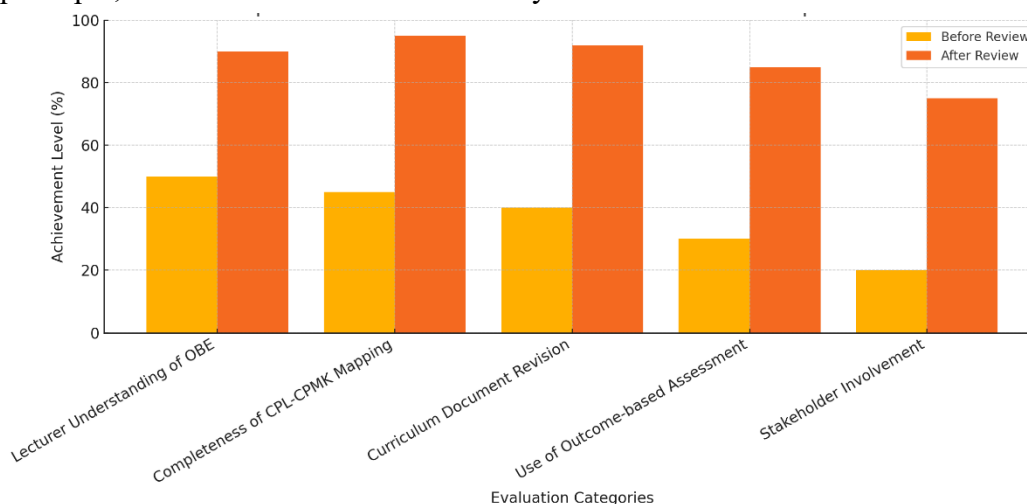
A plan for piloting the revised curriculum in the upcoming academic year.

Suggestions for future training and OBE-based evaluation capacity for faculty members.

3. RESULT AND DISCUSSION

RESULT

The graph illustrates the level of achievement of five leading indicators in implementing the Health Study Program curriculum review based on the OBE principle, both before and after the activity is carried out.



Grafik 1. Comparison of curriculum review results based on one implementation

Each indicator is presented as a percentage of achievement of the ideal total (100%). Lecturer Understanding of OBE. Before the activity, only about 50% of lecturers understood the concept and implementation of OBE. After the workshop and training, this figure increased to 90%, showing the activity's success in improving OBE-based pedagogic literacy—completeness of CPL-CPMK Mapping. Initially, only 45% of courses had valid and systematic CPL-CPMK mapping. After the remapping process in the focus group discussions, this figure jumped to 95%, indicating a much better alignment between learning outcomes.

Curriculum Document Revision. The initial curriculum document still contains many sections that have not been updated according to OBE standards. Before the activity, the completeness level was around 40%, then increased to 92% after the revision, validation, and documentation process. Use of Outcome-based Assessment. Outcome-based assessment methods such as portfolio, OSCE, or performative assessment are still low at the beginning, only 30%. After assessment design training, this figure increased to 85%, indicating a significant increase in the evaluative approach used by lecturers.

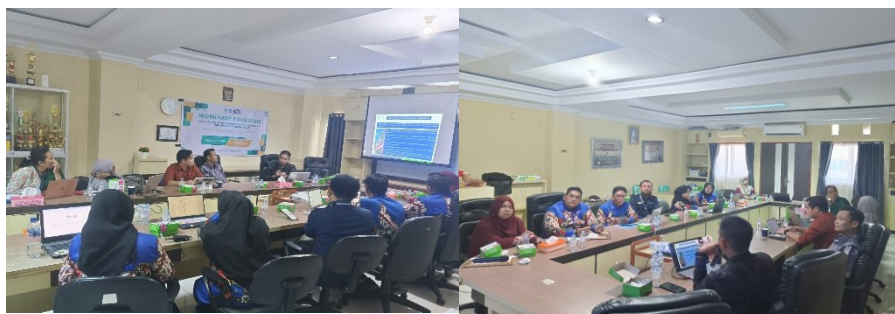


Figure 1. Implementation of curriculum review of outcome-based education.

Stakeholder Engagement. Before the activity, the participation of external parties (such as alumni, graduate users, or professional associations) in curriculum development was only 20%. After the FGD involved stakeholders, this engagement increased to 75%, reflecting a curriculum that is more responsive to the needs of the world of work and society. OBE-based curriculum review activities have a real and positive impact on lecturer understanding, improving academic documents, and implementing achievement-based assessments. Implementing a participatory and evidence-based approach has proven to be effective in encouraging the improvement of the quality of education in the Health Study Program.

DISCUSSION

The curriculum review activity implemented in the Health Study Program using the Outcome-Based Education (OBE) framework has demonstrated significant improvements in multiple critical aspects. The discussion of results is centered around five core areas: faculty understanding of OBE, completeness of CPL-CPMK mapping, quality of curriculum document revisions, integration of outcome-based assessments, and stakeholder involvement. Each component is essential in establishing a robust and effective curriculum aligned with OBE principles, ensuring that educational outcomes translate into professional competencies for graduates (Smith et al., 2023).

Improvement in Faculty Understanding of OBE. The results indicate a substantial increase in the level of understanding among lecturers regarding OBE, from 50% before the intervention to 90% afterward. This improvement highlights the effectiveness of structured workshops and technical mentoring sessions delivered during the activity. Many lecturers initially demonstrated partial or conceptual knowledge of OBE, often limited to awareness of its terminology without a deep grasp of its pedagogical implications. Through guided discussions, practical exercises, and contextual case studies, lecturers could internalize key OBE principles, such as backward curriculum design, constructive alignment, and competency-based learning. This finding aligns with the literature suggesting that successful OBE implementation begins with capacity building among educators. The more confident and informed faculty members are about the paradigm shift from content-based to

outcome-based instruction, the more effectively they can adapt their teaching methods, learning activities, and assessment tools. It also indicates that the gap in implementation is often due not to resistance but to the lack of structured, context-specific training opportunities (Calancie et al., 2025).

Enhancement of CPL-CPMK Mapping. The second significant result relates to mapping Program Learning Outcomes (CPL) with Course Learning Outcomes (CPMK), which improved from 45% completeness to 95%. This step ensures that each course contributes meaningfully and proportionately to the program's goals. Before the activity, inconsistencies were observed in the learning outcomes' vertical and horizontal alignment. Some CPLs were either underrepresented or overly concentrated in specific courses, resulting in redundancy or gaps in competency coverage. Faculty could systematically re-align learning outcomes through curriculum mapping workshops, ensuring that all CPLs are addressed at various depths across multiple courses (Sengupta et al., 2024). Moreover, using curriculum matrices and validation rubrics allowed for a clearer visualization of how CPMKs contribute to CPL achievement. This improvement confirms the effectiveness of collaborative mapping exercises involving course instructors and curriculum developers, fostering shared ownership and integration across the curriculum. Furthermore, such mapping facilitates easier student performance tracking over time, as institutions can ensure that assessments are aligned with course objectives and broader program outcomes. The structured alignment contributes to program coherence and supports the development of outcome-based quality assurance mechanisms (Diamant et al., 2023).

Quality and Completion of Curriculum Document Revisions. Another key improvement is the revised curriculum documentation, which progressed from 40% completeness to 92%. Initially, many course syllabi, lesson plans (RPS), and learning materials did not adequately reflect OBE principles. They often focused on content coverage rather than the development of specific competencies or lacked measurable learning outcomes and aligned assessment tools. Post-intervention, the revised documents demonstrated greater clarity, structure, and consistency. Each course now includes well-formulated CPMKs that follow Bloom's Taxonomy and are linked explicitly to teaching methods and assessment strategies (Zeldman et al., 2025).

Additionally, the revised curriculum structure shows a clear pathway for students to progress from lower-order to higher-order thinking skills, reflecting the principle of progressive learning. This enhancement is significant in the context of accreditation. National and international accreditation bodies increasingly require curriculum documentation to reflect measurable outcomes, evidence-based instructional design, and stakeholder relevance. The ability of the program to generate such documentation strengthens its position in quality assurance and continuous improvement processes (Suprpto et al., 2024).

Integration of Outcome-Based Assessments. The integration of outcome-based assessment strategies showed a dramatic increase from a low baseline of 30%

to 85%. Before the intervention, most assessments relied heavily on written tests and summative evaluations, which were often misaligned with the intended competencies (Suprpto et al., 2025). There was minimal use of performance-based, authentic assessments such as portfolios, OSCEs (Objective Structured Clinical Examinations), or group-based projects that reflect real-world healthcare settings. Through capacity-building sessions, faculty members were introduced to the design and application of diverse, criterion-referenced assessments. They were encouraged to develop rubrics that measure student achievement against predetermined performance indicators aligned with CPL and CPMK. Moreover, formative feedback, reflective practices, and self-assessment were emphasized as part of a student-centered assessment culture. The shift toward outcome-based assessment supports more valid, reliable, and meaningful evaluation of student competencies. It also aligns with global best practices, where students are expected to know and demonstrate what they can do with what they know in practical and professional contexts.

Nevertheless, sustainability remains a challenge. To maintain momentum, follow-up activities are needed, including curriculum implementation monitoring, periodic refresher training for faculty, integration of student feedback mechanisms, and regular stakeholder dialogues. Continuous evaluation and flexibility in curriculum adjustment are essential as healthcare knowledge and technology evolve.

4. CONCLUSION

Implementing a curriculum review using the Outcome-Based Education (OBE) framework in the Health Study Program has proven to be an effective strategy for enhancing curriculum quality, academic alignment, and stakeholder responsiveness. The structured and participatory approach adopted throughout the program has resulted in significant improvements in five key areas: lecturer understanding of OBE principles, the completeness and consistency of CPL-CPMK mapping, the revision of curriculum documents, the integration of outcome-based assessment strategies, and increased stakeholder involvement. The post-review results demonstrate that OBE enables institutions to clearly define, align, and measure educational outcomes that reflect real-world professional expectations when properly facilitated. Through capacity-building and collaborative reflection, lecturers were empowered to design student-centered learning experiences and assessments beyond knowledge transmission and focus on skills application, critical thinking, and ethical practice.

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CONFLICT OF INTERESTS

All authors declare no conflict of interest in this community service program.

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