



Research Article

Curriculum Development Strategy Based on Outcome Based Education (OBE) to Improve the Quality of Education in Higher Education

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Abstract

The aim of this study is to examine the fundamental concepts of Outcome-Based Education (OBE), strategies for developing an OBE-based curriculum, the challenges of its implementation, and its impact on the quality of higher education. This research employs a descriptive qualitative approach using the library research method. Through a literature review, the author analyzes various academic sources and relevant national policies. The findings indicate that OBE emphasizes measurable learning outcomes, active student participation, and the integration of learning with the needs of the workforce. Effective implementation strategies include formulating graduate profiles, developing learning outcomes, designing syllabi and lesson plans (RPS) based on outcomes, and involving external stakeholders. Despite facing several challenges such as resistance to change, limited human resources, and inadequate infrastructure, OBE has proven to enhance graduate competitiveness, study program accreditation, and student engagement in the learning process. Therefore, the OBE approach is recommended as a foundational framework in curriculum development to address the future challenges of higher education.

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INTRODUCTION

The rapid advancement of science and technology in the 21st century has brought about significant changes in various aspects of life, including education. As strategic institutions tasked with producing high-quality human resources, universities have a great responsibility to adapt their educational systems to the demands of the times. Global challenges such as the era of Industry 4.0, the digital revolution, increasingly competitive job markets, and the changing characteristics of learners require universities to continuously innovate, particularly in curriculum development. The curriculum is no longer viewed merely as an administrative tool, but rather as the heart of the learning process that determines the direction and quality of graduate outcomes at an institution. (Kemendikbud, 2020)

One curriculum approach that is widely adopted in many developed countries is Outcome-Based Education (OBE). This approach focuses on learning outcomes or the end results that students must achieve after completing an educational process. In the OBE system, all components of education – from curriculum design and teaching methods to assessment – are aligned and tailored to support the achievement of the

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predetermined learning outcomes (William G Spady, 1994). This makes OBE more flexible, measurable, and responsive to the needs of industry and society. More than just mastering content, OBE demands that students are able to apply knowledge, demonstrate professionalism, and possess relevant real-world skills.

Unfortunately, in practice, many universities in Indonesia still adopt a traditional, teacher-centred curriculum approach, where the success of learning is measured more by content mastery than by competency attainment (Shofwan Almuzani, 2021). Various studies have shown that the gap between university graduates and the demands of the labour market is often due to a lack of focus on outcomes in the learning process. Therefore, developing an OBE-based curriculum is essential if universities are to improve the quality of their graduates and remain relevant amidst dynamic global change.

Developing an OBE curriculum is not merely about drafting new academic documents; it is a process of institutional cultural transformation. It involves the clear formulation of graduate profiles, the articulation of specific and measurable learning outcomes, the development of relevant course content, and the integration of active learning methods and authentic assessment. Furthermore, the implementation of OBE requires synergy between academia and industry to ensure that the curriculum genuinely reflects real-world needs. Thus, the strategy of developing an OBE-based curriculum becomes a crucial step in enhancing the quality of higher education in Indonesia and in responding effectively to globalisation and future labour market demands.

METHOD

This study employs a descriptive qualitative approach using the method of library research. Data sources are obtained from various scholarly literatures, including national and international journals, academic books, and policy documents relevant to the topic of OBE-based curriculum development. Data collection is carried out through literature searches using online databases such as Google Scholar, ResearchGate, and the Garuda portal. The collected data are then analysed qualitatively through content analysis, in order to identify strategies, challenges, and the implications of OBE implementation on the quality of higher education. This method was chosen as it allows for an in-depth understanding of the concepts and practices of OBE from both theoretical and practical perspectives (Akhmad Hafizh Ainur Rasyid et al, 2022)

RESULTS AND DISCUSSION

Fundamental Concepts of Outcome-Based Education (OBE)

Outcome-Based Education (OBE) is an approach in the education system that focuses on the achievement of final learning outcomes that have been explicitly and measurably designed. In this approach, the educational process is designed, implemented, and evaluated based on what students are expected to achieve upon completing an educational programme (Spady, William G, 1994). This means that the focus of learning is no longer on the amount of material delivered by lecturers, but on how effectively students achieve the predetermined competencies.

OBE is not merely a teaching method, but a paradigm that influences the entire curriculum system. This approach requires every educational institution to define learning outcomes clearly at each level and unit of learning. OBE also mandates a flexible, student-centred learning process that encourages the development of critical thinking, problem-solving, teamwork, and communication skills (Roy Killen, 2000). This makes OBE highly relevant for producing graduates who are prepared to face real-world challenges.

There are several key principles in OBE that form the philosophical foundation of this approach. The first is clarity of focus, where the entire educational process must be explicitly directed towards achieving the learning outcomes. The second is designing back, which involves planning the learning system starting from the desired end results rather than content. The third is high expectations, a belief that all students can achieve high levels of competence given the right support and learning opportunities. The fourth is expanded opportunities, referring to the provision of various learning chances for students to achieve optimal outcomes according to their learning styles (Spady, William G, 1994),

The basic philosophy of OBE is rooted in the constructivist view, positioning students as active participants in the learning process. In this context, lecturers act as facilitators who design meaningful and contextual learning experiences. Education is no longer about merely transferring knowledge, but about developing students' potential and character so they can think reflectively and act responsibly (Ronald M

Harden, 2007). Therefore, the OBE approach encourages a transformation in the learning culture at universities.

The fundamental difference between OBE and traditional curricula lies in the orientation of learning objectives. Traditional curricula tend to focus on inputs and the content delivered by lecturers. Evaluation in the traditional system is generally summative, conducted at the end of the learning process, and centred on mastery of material. In contrast, OBE emphasises the learning outcomes that students must possess, using formative and continuous assessment to ensure outcomes are achieved (John Biggs et.al, 2022). Traditional curricula also typically adopt a one-way approach, where students play a passive role in receiving material. OBE, on the other hand, adopts a student-centred approach, encouraging students to be active, critical, and collaborative. Furthermore, traditional curricula generally do not explicitly align courses with graduate profiles and labour market needs. In contrast, OBE requires systematic curriculum mapping, from graduate profiles and programme learning outcomes (PLOs) to course learning outcomes (CLOs), and the teaching and assessment methods used. (Kemendikbud, 2020).

The implementation of OBE in higher education aims to ensure the comprehensive attainment of student competencies across knowledge, skills, and attitudes. OBE not only addresses educational quality challenges but also bridges the gap between higher education and the labour market. Through OBE, universities can design study programmes that are more adaptive and responsive to the dynamic needs of industry and society. Moreover, OBE supports the achievement of quality assurance in higher education systems. As learning outcomes are clearly and measurably defined, monitoring and evaluation processes become more accountable. This aligns with the Merdeka Belajar–Kampus Merdeka (MBKM) policy, which promotes curriculum transformation based on competencies and interdisciplinary learning flexibility. The implementation of OBE is not merely an administrative requirement but part of a long-term strategy for building sustainable institutional quality in higher education (Rasyid et al,2022).

Strategies for Developing an Outcome-Based Curriculum

Developing a curriculum based on Outcome-Based Education (OBE) requires systematic and comprehensive planning, beginning with the identification of graduate profiles and continuing through the alignment of teaching and assessment methods. Each element of the curriculum must be designed to support the achievement of predetermined learning outcomes and remain relevant to labour market demands and global societal dynamics. This process involves not only academic aspects but also cross-sector collaboration with various stakeholders.

The initial step in developing an OBE-based curriculum is the identification of graduate profiles—an ideal representation of the competencies a graduate is expected to possess from a given study programme. These profiles are developed based on an analysis of the needs of graduate users (industry, society, government), advances in science and technology, and national and international standards. Graduate profiles generally encompass three main aspects: attitudes and values, mastery of knowledge, and general and specific skills (Kemendikbud, 2020). This identification forms the foundation for constructing all other curriculum components.

Following the establishment of graduate profiles, the next step involves formulating Programme Learning Outcomes (PLOs), which specify the capabilities students must demonstrate upon completing their study programme. These PLOs are then further articulated into Course Learning Outcomes (CLOs), which form the basis for developing Semester Learning Plans (SLPs). Each CLO must logically support the PLOs, and the SLPs should reflect coherence among learning objectives, instructional strategies, and evaluation method (Biggs, Tang, and Kennedy, 2022) . This process is known as constructive alignment—ensuring alignment among what is taught, how it is taught, and how outcomes are assessed.

Next, the development of syllabi and outcome-based courses becomes a key part of the OBE strategy. Syllabi should not merely focus on content, but also on the skills and attitudes to be developed through each course. Learning materials are organised in a spiral and integrative manner to promote continuous learning. Each course should contribute concretely to the PLOs, and the syllabi must provide detailed information on achievement indicators, instructional strategies, and the types of assessment to be employed (Rasyid et al. 2022)

In the context of OBE, both teaching methods and assessments must be appropriately adapted. Learning approaches should be active and participatory, such as problem-based learning (PBL), project-based learning, case studies, group discussions, and simulations. These approaches align with the OBE spirit of contextual and applied learning. Assessments must also be authentic, reflect real-world scenarios, and measure not only cognitive domains but also affective and psychomotor domains. Formative and reflective assessments are highly recommended to provide meaningful feedback throughout the learning process (Killen, 2000). One of OBE's main strengths is the active involvement of stakeholders, including industry, alumni, and other graduate users. Stakeholders play a crucial role in providing input to curriculum design to ensure it aligns with labour market needs. Discussion forums, tracer studies, and industry needs assessments serve as vital instruments in curriculum development. This collaboration strengthens curriculum relevance and opens opportunities for further partnerships such as internships, applied research, and recognition of work experience (Harden, 2007).

Finally, curriculum development strategies based on OBE should also be supported by technological integration and the application of project- or case-based learning models. Utilising Learning Management Systems (LMS), digital simulations, and collaborative platforms enables the creation of flexible and dynamic learning environments. These models encourage students to think critically, collaborate, and apply theory in practical contexts. This approach not only enhances student engagement in the learning process but also prepares them to face real-world challenges with greater confidence (Rodríguez-Ardura et.al, 2017).

Developing an OBE-based curriculum requires collaborative effort and comprehensive transformation, from lecturers' paradigms and institutional management to the involvement of external partners. When properly designed and consistently implemented, OBE can serve as an effective tool for improving the quality of higher education and producing competent, adaptive, and globally competitive graduates.

Challenges in Implementing OBE in Higher Education

Although Outcome-Based Education (OBE) presents numerous advantages in enhancing the quality and relevance of higher education, its implementation in Indonesian universities continues to face various structural and cultural challenges. These challenges arise not only from technical aspects but also from issues related to human resource preparedness, supporting infrastructure, and prevailing academic mindsets.

One of the main challenges lies in the readiness of lecturers and educators. OBE requires a shift from the traditional role of lecturers as mere transmitters of knowledge to facilitators of learning who are capable of designing activities based on intended learning outcomes. This transformation demands specific training, a strong understanding of learning outcome formulation, instructional design, and authentic assessment. Unfortunately, not all lecturers possess sufficient pedagogical competence to effectively implement this approach. Additionally (Rasyid et al, 2022). high administrative workloads and limited time often hinder lecturers' optimal involvement in developing an OBE-based curriculum (Muchammad Ibnu Muzakir, 2023)

Another significant challenge concerns limited resources and infrastructure. Implementing OBE requires robust information technology support, flexible learning spaces, access to digital learning tools, and a reliable Learning Management System (LMS). However, many universities, particularly those in regional areas, still face funding constraints and lack adequate facilities to support active learning and project- or case-based assessment methods. Moreover, academic information systems that are not integrated with learning outcomes can complicate the monitoring and reporting of student achievement (Kemdikbud, 2020). Changing long-standing mindsets is also a notable cultural challenge. Many institutions and lecturers remain accustomed to content-centred approaches that prioritise content mastery through lectures and written exams. Transitioning to outcome-based learning requires the courage to abandon established habits and adopt a new, more complex approach that demands active student participation. This often encounters resistance, as it is perceived to be burdensome and misaligned with entrenched academic practices. A lack of understanding of OBE's core philosophy frequently results in superficial or administrative implementation rather than substantive adoption. Another important challenge relates to evaluation and quality assurance. Within the OBE framework, evaluation goes beyond measuring students' academic success — it also involves assessing the effectiveness of the entire learning system in achieving outcomes. This requires a strong internal quality assurance system oriented towards continuous quality improvement. In practice, however, many universities lack accurate data-driven monitoring and evaluation systems (Biggs, Tang, and Kennedy, 2022). , and the involvement of external

stakeholders is often minimal. As a result, OBE implementation is often inconsistent, difficult to measure effectively, and poorly documented. To address these challenges, a strategic and phased approach to OBE implementation is necessary. Higher education institutions must invest in ongoing professional development for lecturers, strengthen digital infrastructure, and build an academic culture that embraces change. Collaboration between institutional leadership, lecturers, students, and external partners is essential to establish an outcome-based learning environment that genuinely enhances graduate quality.

Case Studies of OBE Implementation

The implementation of OBE-based curricula in Indonesia has been pioneered by several leading universities, including Institut Teknologi Bandung (ITB) and Universitas Indonesia (UI). These institutions have been at the forefront of shifting the higher education paradigm from input- and process-oriented to outcome-driven, measurable, and aligned with the needs of graduate users.

At ITB, systematic OBE implementation began in 2016 as a response to international accreditation demands such as those from the ASEAN University Network-Quality Assurance (AUN-QA) and the Accreditation Board for Engineering and Technology (ABET). ITB's strategy involves formulating graduate profiles for each programme based on industry demands, international standards, and input from alumni and graduate users. These profiles are then translated into detailed and measurable Programme Learning Outcomes (PLOs), which serve as the foundation for designing modules, syllabi, and assessment methods (Institut Teknologi Bandung, 2020). ITB also emphasises the importance of constructive alignment—ensuring coherence between learning objectives, learning activities, and assessments—and strengthens data-driven quality assurance systems to objectively evaluate each outcome.

Meanwhile, Universitas Indonesia (UI) has adopted OBE as part of its curriculum development since the launch of the Merdeka Belajar – Kampus Merdeka (MBKM) initiative by the Ministry of Education. UI has built an outcome-based learning ecosystem by aligning PLOs with the National Higher Education Standards (SN-Dikti) as well as the evolving demands of the labour market and academic disciplines. One example of OBE implementation at UI is the use of project-based learning models and student involvement in internships, independent studies, and multidisciplinary research. This strategy is integrated with digital tools such as Learning Management Systems (LMS) to support documentation and outcome-based assessment. (Universitas Indonesia, 2021).

The initial impacts at both institutions have been promising. At ITB, this approach has improved the alignment between graduate competencies and industry requirements. Several programmes have even achieved international accreditation, such as ABET and ASIIN, demonstrating compliance with global educational standards (Institut Teknologi Bandung, 2020). UI has reported that graduates engaged in outcome-based learning show improved performance in problem-solving, communication, and adaptability in the workplace. Regular, data-based evaluations have become key instruments in measuring the success of this approach. From these case studies, several key lessons can be drawn. First, strong institutional leadership and support are essential for driving curriculum reform. Second, active engagement from lecturers and external stakeholders—particularly industry and alumni—is crucial to developing relevant curricula. Third, integrating technology into teaching and assessment is vital for the efficient and measurable implementation of OBE. Finally, fostering a culture of ongoing evaluation and adaptive quality assurance is critical to ensuring that OBE has a genuine and lasting impact beyond administrative compliance.

The Impact of OBE on Education Quality

The implementation of the Outcome-Based Education (OBE) approach in higher education has brought substantial improvements to overall education quality. One of the most notable impacts is the increased competitiveness of graduates. Through clearly defined and measurable learning outcomes, students are prepared not only to graduate academically but also to compete in a global labour market. Graduates of OBE systems often possess strengths in critical thinking, communication, teamwork, and data-driven decision-making, owing to their engagement in outcome-focused and practical learning activities (Biggs, Tang, and Kennedy, 2022). These competencies contribute directly to improved graduate employability and adaptability across various industries.

Another significant impact is the improvement of institutional and programme accreditation. Many national and international accreditation bodies, such as BAN-PT, ABET, and AUN-QA, explicitly require learning to be based on measurable outcomes. Higher education institutions that successfully adopt OBE are generally better equipped to meet such standards, as their planning, delivery, and evaluation processes are well-structured and evidence-based (Muzakir, 2023). In Indonesia, several programmes that apply OBE have achieved top-tier national and international accreditation, which not only serves as a quality benchmark but also enhances their global academic reputation (Kemendikbud, 2020)

OBE also enhances the alignment of curricula with labour market needs. Under this approach, curricula are designed around graduate profiles defined in collaboration with industry, employers, and alumni. This ensures that curricula remain responsive to technological advances, workplace demands, and global challenges. Consequently, graduates leave university equipped not only with academic knowledge but also with the practical skills necessary to succeed professionally. Moreover, OBE promotes greater student engagement in the learning process. Learning becomes more interactive and participatory, moving away from traditional lecture-based delivery. Students are actively involved in projects, case studies, group discussions, presentations, and reflective activities. This not only nurtures independent learning and creativity but also instils a sense of responsibility for one's own educational journey (Killen, 2000). In OBE, students are viewed as the central agents of learning, which significantly enhances their educational experience. Ultimately, OBE represents a transformative shift in higher education. It strengthens technical and procedural aspects of learning while fostering a collaborative, outcome-oriented, and globally relevant learning culture. Therefore, OBE stands as a vital strategy for building high-quality, inclusive, and globally competitive universities.

CONCLUSION

This study highlights the pivotal role of Outcome-Based Education (OBE) in enhancing the quality of higher education by aligning curriculum development with measurable and clearly defined learning outcomes. Unlike traditional teacher-centered approaches that emphasize content delivery, OBE focuses on what students are expected to achieve, promoting active learning and competency attainment. The philosophy of OBE, grounded in constructivist theory, encourages students to become active participants who apply knowledge and demonstrate professionalism, critical thinking, and relevant real-world skills.

Effective implementation of OBE involves a comprehensive strategy, including the formulation of graduate profiles, the development of precise and measurable learning outcomes, and the design of syllabi and lesson plans that are outcome-focused. This approach demands close collaboration among academic institutions, industry stakeholders, alumni, and other users of graduates to ensure curriculum relevance and responsiveness to labor market demands. Such partnerships foster opportunities for internships, applied research, and the recognition of work experience, bridging the gap between academic learning and workforce requirements. Despite challenges such as resistance to change, limited human resources, and inadequate infrastructure, the adoption of OBE has demonstrated significant benefits, including improved graduate competitiveness, enhanced accreditation status for study programs, and increased student engagement. Moreover, OBE supports quality assurance frameworks and aligns with national educational policies like Indonesia's Merdeka Belajar–Kampus Merdeka (MBKM), which emphasize competency-based and flexible interdisciplinary learning.

BIBLIOGRAFI

- Almuzani, Shofwan. "Urgensi Filsafat Pendidikan Dan Hubungannya Terhadap Pengembangan Kurikulum 2013." *Pensa* 3, no. 1 (2021): 46–66.
- Biggs, John, Catherine Tang, and Gregor Kennedy. *Teaching for Quality Learning at University 5e*. McGraw-hill education (UK), 2022.
- Domino, Primus, and Nur Eva. "Implementasi Evaluasi Program Berbasis Outcome Di Perguruan Tinggi." In *Prosiding Seminar Nasional Fakultas Ilmu Pendidikan*, 3:766–73, 2019.
- Harden, Ronald M. "Outcome-Based Education: The Future Is Today." *Medical Teacher* 29, no. 7 (2007): 625–29.

- Institut Teknologi Bandung. "Panduan Pengembangan Kurikulum Berbasis OBE di ITB". Direktorat Pendidikan ITB, 2020.
- Killen, Roy. "Outcomes-Based Education: Principles and Possibilities." *Unpublished Manuscript, University of Newcastle, Faculty of Education*, 2000, 1–24.
- Kementerian Pendidikan dan Kebudayaan. "Panduan Implementasi Kurikulum MBKM". Direktorat Jenderal Pendidikan Tinggi. 2020
- Muzakir, Muchammad Ibnu. "Implementasi Kurikulum Outcome Based Education (Obe) Dalam Sistem Pendidikan Tinggi Di Era Revolusi Industri 4.0." *Edukasiana: Journal of Islamic Education* 2, no. 1 (2023): 118–39.
- Rasyid, Akhmad Hafizh Ainur, Bellina Yunitasari, I Wayan Susila, Dewanto Dewanto, Yunus Yunus, and Dany Iman Santoso. "Pengembangan Model Evaluasi Pembelajaran Berbasis Obe." *JP (Jurnal Pendidikan): Teori Dan Praktik* 7, no. 1 (2022): 8–17.
- Rodríguez-Ardura, Inma, and Antoni Meseguer-Artola. "Flow in E-learning: What Drives It and Why It Matters." *British Journal of Educational Technology* 48, no. 4 (2017): 899–915.
- Universitas Indonesia. "Laporan Penerapan Kurikulum Berbasis Outcome di UI", Direktorat Pendidikan UI, 2021.
- Spady, William G. *Outcome-Based Education: Critical Issues and Answers*. ERIC, 1994.