

TRANSFORMATION OF THE EDUCATIONAL PARADIGM THROUGH OUTCOME-BASED EDUCATION IN THE ERA OF DISRUPTION

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ABSTRACT

This article aims to analyze the transformation of the education paradigm through *the Outcome-Based Education* (OBE) approach in response to the demands of the disruption era. The main problem studied is the mismatch between the traditional educational paradigm, oriented toward process and material, and the competency needs of the 21st century, which demand that graduates be adaptive, competent, and relevant to the world of work. This research uses a library research approach by conducting a critical review of library sources, including journals, books, educational policies, and previous research results, relevant to the implementation of OBE. The results of the study show that OBE can provide a new direction for the education system through an outcome-based curriculum, active learning, authentic assessments, and a shift in educators' roles from teachers to facilitators. However, the implementation of OBE also faces various obstacles, including educators' limited understanding, the dominance of lecture methods, unpreparedness for assessments, and weak institutional support. This article emphasizes that implementing OBE requires structured curriculum design, educator training, the integration of learning technologies, collaboration with industry, and a continuous evaluation system to address educational challenges in the era of disruption.

Keywords: Transformation, Paradigm, OBE, Era of Disruption

INTRODUCTION

Education in the 21st century faces very complex challenges due to the rapid flow of globalization, the development of digital technology, and rapid social change. This era is often called the era of disruption because of its fundamental, rapid, and sometimes unexpected changes. (Rachmadtullah et al., 2020) Disruption not only hits the industrial, economic, and social sectors but also requires the education system to adapt significantly to remain relevant to the needs of the times. In the era of disruption, traditional education systems that prioritize inputs and processes are no longer considered sufficient to prepare students to face global challenges. The world of work, for example, now requires not only graduates with academic knowledge, but also practical skills, creativity, communication skills, and digital literacy. This emphasizes that education must undergo a paradigm shift to avoid being left behind.

The old paradigm that emphasizes the transfer of knowledge from teachers to students without considering the development of real competencies is increasingly being seen as irrelevant. Education should no longer be limited to producing graduates who are good in theory; it must

also produce a competent, adaptive, and innovative generation. Within this framework, *Outcome-Based Education* (OBE) is a promising alternative for transforming educational perspectives (Asim et al., 2021; Szabo et al., 2020).

OBE is an educational approach that focuses on the final learning outcomes, namely the competencies students have after completing the learning process. In contrast to the traditional approach, OBE emphasizes not only what is taught, but also what students are capable of doing after studying. This makes OBE in line with the demands of the era of disruption that emphasizes global productivity, relevance, and competitiveness. The urgency of implementing OBE is even more apparent when we consider the skills gap in various countries, including Indonesia. Many college and high school graduates are not fully ready to enter the workforce because their skills do not align with industry needs. OBE, with its orientation to competency achievement, is believed to be a strategic solution to overcome these gaps (Habets et al., 2020).

In addition, OBE provides educational institutions with the flexibility to design curricula that are more responsive to changing times. The curriculum is no longer rigid, but is designed to adapt to the real needs in the field. This allows the learning process to be more contextual, applicable, and oriented towards 21st-century competency development. The implementation of OBE also demands a shift in educators' roles. Teachers and lecturers not only convey information but also serve as facilitators, mentors, and developers of students' potential. This role change is critical to building a learning ecosystem that is collaborative, creative, and based on real problem-solving.

The transformation of the educational paradigm through OBE also has implications for changes in the assessment system. Assessment is not only in the form of a written test or final exam but also emphasizes authentic assessments that illustrate students' achievement of competencies in various situations. The quality of graduates can be more objectively measured and in accordance with real-world needs. (Nugraha et al., 2021). The urgency of research on the transformation of the educational paradigm through OBE is critical because the world of education faces dual demands: maintaining relevance amid change and improving quality amid global competition. This research can provide an overview of the extent to which OBE can be implemented, the challenges that may arise, and the strategies to optimize results. (Gruppen, 2012).

This research can also make a significant contribution to the development of education policy. With empirical evidence and in-depth analysis, policymakers can formulate education strategies that are more targeted, inclusive, and responsive to society's and industry's needs. This is important to ensure that education is truly the driving force of national development.

Research on OBE in the era of disruption can strengthen academic understanding of the relevance of educational theory to practice in the field by examining this paradigm transformation. Academics and education practitioners can enrich scientific discourse while producing applicable educational innovations. Therefore, this article aims to analyze in depth the transformation of the educational paradigm through the Outcome-Based Education approach in the era of disruption. This article aims to answer the fundamental questions of why OBE is relevant in this era, how its application can improve the quality of education, and what its implications are for education globally.

RESEARCH METHODS

This research uses a library research approach that emphasizes collecting data, information, and ideas from relevant library sources, including books, scientific articles, journals, research reports, and policy documents. (Chigbu et al., 2023). The primary purpose is not to conduct field experiments, but to explore, analyze, and synthesize existing academic ideas to provide a more transparent conceptual framework for the topic under study.

In this research, library research was conducted to examine how the concept of Outcome-Based Education (OBE) is understood and applied in education, as well as how the educational paradigm is being transformed to address the challenges of the era of disruption. The *library research method* in this study comprises the stages of identifying, classifying, and analyzing literature. (Mestika Zed, 2014). The researcher first selects credible and relevant sources, then classifies them by themes, such as the theoretical foundation of OBE, the Ministry of Education and Culture's policy on achievement-based education, and literature on educational transformation in the era of disruption. (Pervaiz et, al, 2023). Based on this classification, the researcher conducted a critical analysis to examine the linkages, differences in views, and opportunities for the development of the OBE concept in the context of Indonesian education. Thus, this research contributes to the theoretical realm through an in-depth literature review and provides a new conceptual perspective on the direction of educational transformation. The *library research* not only describes existing ideas but also synthesizes them to produce a comprehensive understanding of the role of OBE in transforming the educational paradigm in the era of disruption. The results of this research are expected to serve as an academic foundation for future research and a reference for education policies that are more adaptive to changing times.

RESULTS AND DISCUSSION

1. Result

a. Outcome-Based Education Curriculum

The Outcome-Based Education (OBE) Curriculum is an educational approach that places learning outcomes at the center of the entire learning process. (Novrizal & Muhammad, 2025). This approach emphasizes that students must be able to demonstrate real competence upon completing their learning, in the form of knowledge, skills, and attitudes. (Aggarwal, 2024). Thus, OBE shifts the focus of education from what teachers or lecturers teach to what students should be able to do. This orientation makes learning more directed, measurable, and relevant to real-world needs.

In Indonesia, the OBE approach has been formally adopted through the Ministry of Education, Culture, Research, and Technology's policy. In Permendikbud No. 3 of 2020 on the National Standards for Higher Education, the government emphasizes that each study program must establish Graduate Learning Outcomes (CPL), which serve as the basis for curriculum preparation. (Permendikbud, 2020). This CPL includes attitudes, knowledge, general skills, and specific skills. The entire curriculum, including course structure, learning methods, and assessments, must show a direct connection to the CPL. Thus, the implementation of OBE is the main framework for ensuring the quality of higher education in Indonesia.

The Ministry also emphasized that OBE is fully aligned with the Independent Learning-Independent Campus (MBKM) policy, which provides students with flexibility. (Trianung et al., 2024). Through MBKM, students can learn outside the study program by engaging in internships, research, humanitarian projects, and other measurable activities aligned with CPL. This policy reflects the principle of expanded opportunities in OBE, namely that students must be given a range of opportunities to achieve competencies optimally, aligned with their interests and career needs. (Nurjannah et al., 2024). Overall, the OBE-based curriculum forms a more modern, relevant, and quality-oriented educational paradigm. By placing learning outcomes at the center of all educational activities, OBE ensures that graduates have the necessary competencies to face the challenges of professional, social, and global life. This approach encourages educational institutions to transform from a system that focuses on teaching to a system that relies on learning and real competency development.

b. The Era of Disruption and Educational Challenges

The era of disruption can be understood as a period of significant change marked by digital technology that shifts old patterns across various aspects of life, including education. Disruption is not just about fixing old ways. However, presenting new ways that are more

efficient, fast, and adaptive (Lubis, 2019). In the world of education, this can be seen from the shift from the conventional face-to-face learning model towards digital learning that is flexible, interactive, and accessible at any time. The characteristics of the era of disruption include the acceleration of innovation, the emergence of new professions, the uncertainty about the direction of change, and increasingly fierce global competition (García-Morales et al., 2021).

Technological, social, and economic developments in the era of disruption significantly influence education. Digital technologies such as the internet, *artificial intelligence*, *big data*, and online learning platforms are driving the emergence of new, more modern learning models, such as blended and *personalized learning*. (Chauca et al., 2021). From a social perspective, the younger generation who grew up in the digital world demands a learning method that is not only teacher-centered but also more interactive, collaborative, and project-based. From an economic perspective, the dynamics of the world of work are increasingly competitive with the demands of 21st-century skills, including digital literacy, creativity, problem-solving, and innovation. Education is also required to transform so that it not only produces knowledgeable graduates but is also ready to compete in the global job market. (Hasan et al., 2023).

The gap between the traditional education paradigm and the 21st-century competency needs is a challenge in itself. (Hermansyah et al., 2021) The traditional paradigm is still oriented towards one-way knowledge transfer, emphasizing memorization, and assessing the success of many of the materials that students master. This model becomes less relevant as the world demands more complex skills such as critical thinking, communication, collaboration, and adaptability to change. As a result, many graduates excel academically but are not fully prepared for the demands of the workforce. To address this gap, education must transform the paradigm by emphasizing relevant learning outcomes, including the implementation of Outcome-Based Education (OBE), which focuses on real results and the competencies needed in the era of disruption.

Educational transformation is closely related to the development of human resources (HR) because the quality of HR reflects the quality of the education system (Alam & Dewi, 2024). Transformative education can give birth to a generation that is not only intellectually intelligent but also morally, spiritually, and socially superior. In the context of national development, adaptive and innovative human resources (HR) are the main capital in increasing the nation's competitiveness at the global level. This is in line with the mandate of the Minister of Education and Science of the Republic of Indonesia Number 39 of 2025 concerning Quality Assurance of Higher Education, which emphasizes that general skills are

needed as the basis for mastering science, technology, and relevant fields of work (Presiden RI, 2025) In addition, these skills are also an important foundation for the development of the skills needed to enter the world of work, continue their studies to a higher level, or obtain a professional certificate. Thus, superior and competitive human development cannot be separated from the quality of the education system that can transform comprehensively, be adaptable to changing times, and be future-oriented.

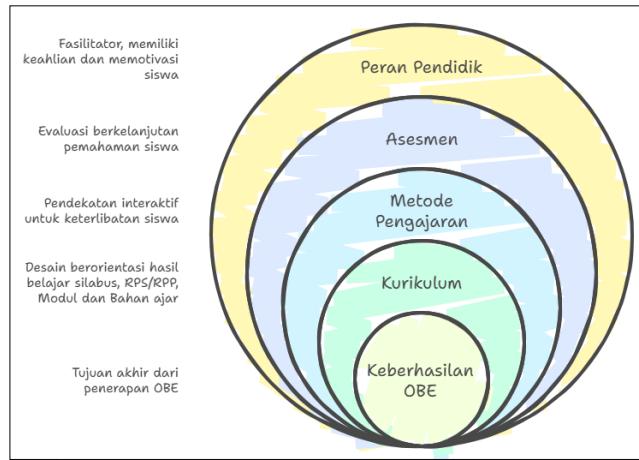
c. Implementation and Discussion of OBE Research Results

The implementation of OBE in the curriculum begins with designing learning outcomes that are clear, measurable, and relevant to graduates' needs. The OBE curriculum is arranged in reverse (*backward design*): first, determine the final results students want to achieve, then design materials, learning experiences, and evaluations that support the achievement of these results. (He & Liu, 2024) Curriculum preparation is carried out systematically, starting from the study program, courses, and learning indicators at the meeting level, so that each learning element has a logical, consistent relationship to the final competency. (Sumathi et al., 2024).

In the aspect of learning methods, OBE emphasizes student-centered and real-experience learning. The method used is no longer predominantly lectures; it is now active learning, such as discussions, projects, case studies, simulations, problem-based learning, or fieldwork. (Sukacke et al., 2022 ; Martinez & Gomez, 2025). This type of learning allows students not only to understand concepts but also to apply them in professional contexts. Thus, the learning strategy in OBE encourages critical thinking, collaboration, creativity, and problem-solving skills.

In the assessment strategy, OBE demands an evaluation aligned with the learning outcomes. Assessments not only test memorization, but also measure the real abilities targeted in the curriculum. The forms of assessment that are often used are authentic assessments such as portfolios, projects, work demonstrations, presentations, self-reflection, and competency assessment rubrics. Assessments are carried out not only at the end, but also on an ongoing basis to provide *feedback* that helps students improve their learning process.

The role of educators in OBE has shifted from merely delivering content to designing learning environments that enable students to achieve the set competencies. (Carless, 2020). Educators must be able to connect learning outcomes to appropriate learning and assessment strategies and serve as facilitators, providing practical guidance and feedback. In OBE, educators also serve as collectors and analysts of evidence of achievement, not just teachers in the classroom. (Sumera & Ali, 2022). Therefore, educators are pressured to have reflective learning design skills and to adapt effectively.



Picture 1. OBE Implementation Strategy

The image above shows the hierarchy of the strategy for *implementing Outcome-Based Education* (OBE), which requires integrated planning among curriculum, learning methods, assessments, and educator roles, so that the entire educational process is truly oriented towards final learning outcomes. The curriculum in OBE must be designed starting from the determination of graduate profiles and learning outcomes (CPL), then translated into a course structure, teaching materials, and learning activities that are relevant to the needs of the world of work and the development of the times. (Novrizal & Muhammad, 2025). The learning method is chosen adaptively, emphasizing active, collaborative, project- or problem-based learning, so that students not only gain knowledge but also demonstrate real competence. Assessments in OBE are authentic and performance-based, measuring not only memorization but also critical thinking skills, creativity, attitudes, and practical skills aligned with the CPL. In this system, educators play the roles of learning experience designers, facilitators, mentors, and evaluators, ensuring that each student achieves the set learning outcomes. (Eguia, 2022). The implementation of the strategy also requires continuous reflection and improvement through monitoring, evaluation, and tracer studies to ensure the relevance of graduates to professional needs. With the synergy of these four elements, OBE becomes an educational strategy that not only emphasizes the process but also ensures that graduates' outputs and outcomes are truly high-quality and measurable.

Each learning activity must be documented, assessed, and analyzed to ensure that graduate achievements are achieved consistently. Institutions need to build a continuous evaluation cycle to continually improve curriculum, methods, and assessments to meet real-world needs. In addition, collaboration with external parties, such as industry and the community, is needed to keep educational outcomes relevant (Kumar, 2020). Overall, the strategy of implementing OBE is not only to change the curriculum format, but also to change the perspective on education. The focus is no longer on what educators teach, but on what students are really good at. OBE is successfully implemented when the curriculum is

structured, active-learning methods are used, authentic assessments are employed, and educators serve as reflective learning facilitators.

DISCUSSION

a. Outcome-Based Education

The implementation of the Outcome-Based Education (OBE) Curriculum emphasizes a paradigm shift in the learning system, from a previously teacher-oriented approach to one that focuses on achieving student learning outcomes. In this model, students are positioned as active subjects who must demonstrate real competence in knowledge, skills, and attitudes after completing the learning process. This orientation makes learning more measurable and relevant because all academic activities are directed toward producing competent graduates who meet real-world needs.

In Indonesia, the OBE framework is emphasized through Permendikbud No. 3 Tahun 2020, which requires each study program to set a Graduate Learning Outcome (CPL). This CPL is the basis for preparing the curriculum, from the course structure to learning methods and evaluation systems. This affirmation ensures a systematic linkage among the curriculum, the learning process, and the quality of graduates, so that the implementation of OBE serves as the main instrument for quality assurance in higher education.

The Independent Learning Policy Independent Campus (MBKM) also strengthens the implementation of OBE by providing space for students to study flexibly outside the study program. Through activities such as internships, research, humanitarian projects, and entrepreneurship, students are encouraged to gain a broader yet measurable learning experience, as they are directly associated with CPL. This is in line with the principle of expanded opportunities in OBE, which provides students with various avenues to achieve optimal competencies.

Overall, the integration between OBE and MBKM forms a new paradigm of higher education that is more adaptive, modern, and responsive to global developments. By placing learning outcomes at the center of the entire academic process, educational institutions are required to transform their approach to be more oriented towards real competency development. This model ensures that graduates not only understand theoretical concepts but also apply them in professional and social contexts, making them better prepared to face the demands of the times.

b. Challenges, obstacles, and potential solutions

The implementation of OBE (*Outcome-Based Education*) in various educational institutions faces several challenges related to curriculum, learning methods, assessments, and the role of educators. At the curriculum level, the problem that often arises is the incompatibility between

the formulated learning outcomes and the curriculum design, which remains content-based (Katawazai, 2021). Many lecturers or teachers have not fully understood how to formulate a measurable CPL and reduce it into RPS, modules, and learning activities. (Susanti et al., 2024). This is reflected in the still high number of preparation of teaching tools that are not based on competency achievements. Similar obstacles also arise in the application of learning methods that should be active, contextual, and performance-oriented. OBE requires the use of learning models such as *project-based*, *problem-based*, or *case-based learning*. However, its implementation is often constrained by facility limitations, technological readiness, and educators' habits that remain dominant in the use of traditional lecture methods (Guo et al., 2020).

The assessment aspect is also an obstacle because most educators still focus on final test-based assessments rather than on authentic assessments that assess fundamental skills, soft skills, and the learning process. Rubric-based, portfolio-based, and performance assessments are still rarely used due to a lack of preparation for assessment competencies and training. This barrier is reinforced by the fact that many educators have not undergone systematic OBE training, so the role of educators has not fully transformed into that of facilitators of learning. Administrative burdens, lack of institutional support, and the dominance of *a teacher-centered mindset* have slowed down the transformation that OBEs require.

Solutions that can be implemented in the short term include integrated OBE training, practice-based mentoring, and the preparation of standard assessment standards that are easy for educators to apply. Institutions also need to provide incentives and performance appraisal systems that encourage consistent OBE implementation. In the long term, the success of OBE requires integrating education policies with industry needs, leveraging technology such as learning analytics, and strengthening collaborative ecosystems among schools, universities, the government, and the world of work. (Royani et al., 2025). If all these elements are connected, then OBE is not only a purely curricular approach but also a learning system that prepares graduates to adapt, compete, and be relevant to the demands of the 21st century. (Zhao, 2025).

c. Strategic Implications and Recommendations

The application of OBE to students can shift the focus from input to more concrete outputs, namely, the abilities students can demonstrate. (Rao et al., 2020). Logically, this encourages learning design oriented toward real activities (projects, simulations, portfolios) so that the learning process is more meaningful when the final goal is clearly formulated, and so that each activity and assessment can be compiled directly to measure these achievements. (Novrizal & Muhammad, 2025). This is done so that students become more motivated, as they see a direct relationship between their learning efforts and competencies that can be used

in the world of work or daily life, making learning no longer a matter of mechanical memorization but a functional, applicable process.

The further impact for students appears in the diagnostic and remedial aspects. OBE demands a systematic formative assessment, so that competency weaknesses are detected early, and interventions can be delivered on target (Trujillo et al., 2025). Logically, this improves learning efficiency and reduces achievement inequality between students because remediation programs can be tailored to individual needs. (Warburton et al., 2017). In addition, when achievement standards are published, students have clear expectations and transparency. This can reduce ambiguity about what to master and reinforce students' own learning outcomes.

For educators, OBE requires a shift in role from teacher-as-presenter to learning experience designer and performance assessor. Logically, education personnel (tendik) must master the technique of preparing competency-based learning objectives, designing assessment rubrics, and using assessment data for instructional improvement; without this ability, the implementation of OBE will be superficial and only rhetorical. Therefore, educators' professionalism is required to continuously update pedagogical competencies and assessments, thereby directly improving the quality of learning practices when professional development support is provided systematically.

At the institutional level, the implementation of OBE strengthens the transparency, accountability, and relevance of the curriculum to external needs (industry, society). Logically, when institutions pursue specific outcomes, they need to build an achievement-monitoring system, an external cooperation network for competency validation, and a continuous quality improvement mechanism; this forces institutions to transform from input-based management to results-based management. However, these changes also demand investment in staff training, learning information systems, and assessment resources so that institutions are ready to allocate budgets and strategic priorities to the sustainable implementation of OBE.

To support OBEs in the era of disruption, the logical policy direction is to encourage a flexible learning ecosystem: integrating educational technologies (LMS, e-portfolios, online assessments), recognizing non-formal learning (microcredentials), and facilitating collaboration with the industrial sector. (Ahmad et al., 2025). The rational reason is that the era of disruption changes skills needs quickly, so that rigid policies will make graduates irrelevant; policies that provide curriculum flexibility and legitimacy for project/industry-based learning allow for a faster response to changes in the labour market and technology. (Christensen, 2025). Policies must also emphasize data-driven *accountability* so that policymakers can monitor the achievement of *outcomes in real time* and adjust support according to the needs of the times.

CONCLUSION

The transformation of the educational paradigm through *the Outcome-Based Education* (OBE) approach is necessary in an era of disruption marked by rapid technological, social, and economic change. Traditional education systems that are still oriented towards knowledge transfer and rote-based assessments are no longer relevant to the demands of 21st-century competencies, which emphasize creativity, collaboration, digital literacy, and adaptive skills. Therefore, OBE is an approach that shifts the focus from inputs and the learning process to measurable, tangible outcomes, aligned with the needs of educational institutions and industries for job applications.

The implementation of OBE not only touches on the technical aspects of the curriculum but also demands a repositioning of educators' roles, learning methods, and assessment systems. The curriculum must be designed using *backward design*; *the learning method must be active and contextual; and the assessment must be authentic* to truly reflect graduates' competencies. This change emphasizes that the amount of material taught no longer measures the success of education, but rather the extent to which students can demonstrate fundamental skills in line with the needs of the world of work and the times.

However, the implementation of OBE faces various structural and cultural challenges. The biggest obstacles lie in educators' limited understanding of the formulation of learning outcomes, the dominance of lecture methods, the inconsistency of assessments, and the lack of consistent institutional support. In addition, this paradigm shift is still hampered by an educational culture that assesses success by test scores rather than competence. Therefore, structured educator training, policy strengthening, technology support, and a continuous evaluation system are needed so that OBE does not stop at discourse but becomes a measurable and beneficial educational practice. Overall, OBE offers a more relevant, measurable, and quality-oriented education model for graduates. However, its success depends heavily on policy synergy, educator professionalism, institutional readiness, and collaboration with industry and society. If implemented consistently, OBE not only addresses the skills gap but also becomes the primary driver of improving the quality of Indonesia's human resources, which are adaptive, innovative, and globally competitive amid the era of disruption.

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