

Design Curriculum Based on Outcome Based Education (OBE): Preparing Work Ready Graduates

Nesa Novrizal, Ibn Khaldun University Bogor, Indonesia

Rio Ravi Muhammad, Ibn Khaldun University Bogor, Indonesia

Email: nesanovrizal@uik.ac.id

Received : 24-02-2025

Revised : 25-02-2025

Approved : 05-03-2025

Published : 05-03-2025

DOI: <https://doi.org/10.61159/edukasiana.v4i1>

Abstract

This study explores how Outcome-Based Education (OBE) curriculum design can help prepare graduates for the workforce. A qualitative approach is used to gain an in-depth understanding of how OBE principles are applied in higher education and how they contribute to improving graduate competencies in line with industry needs. This study uses a qualitative method with data obtained through a literature review and interviews with academics and education practitioners to identify key factors in developing an OBE-based curriculum. The results show that OBE emphasizes the achievement of measurable learning outcomes that are relevant to the job market through the formulation of clear learning objectives, the use of teaching methods that focus on skills development, and outcome-based assessments that evaluate graduate readiness. By implementing an OBE-based curriculum, educational institutions can more effectively equip students with the skills and knowledge required by industry demands, thereby increasing their chances of getting jobs that match their expertise.

Keywords: Curriculum design, work readiness, higher education,

Abstract

This study explores how the design of a Results-Based Education (OBE) curriculum can help prepare graduates to enter the workforce. A qualitative approach is used to gain an in-depth understanding of how OBE principles are applied in higher education and how they contribute to improving graduate competencies according to industry needs. This study uses a qualitative method with data obtained through literature review and interviews with academics and education practitioners to identify the main factors in developing an OBE-based curriculum. Research Results show that OBE emphasizes the achievement of measurable learning outcomes that are relevant to the job market through the formulation of clear learning objectives, the use of teaching methods that focus on skill development, and outcome-based assessments that evaluate graduate readiness. By implementing an OBE-based curriculum, educational institutions can more effectively equip students with the skills and knowledge required by the demands of the industry, thereby increasing their chances of landing a job that matches their skill set.

Keywords: Curriculum design, job readiness, higher education,

A. Introduction

Universities in Indonesia are currently faced with increasingly complex global challenges as well as fierce competition in the era of globalization. The rapid development of technology, coupled with the transformation triggered by the Industrial Revolution 4.0, has changed various aspects of life, including the world of work and the need for professionals.

This change requires universities to be able to produce graduates who not only have strong academic knowledge, but are also equipped with practical skills, critical thinking skills, and high competitiveness at the global level. In addition, graduates are expected to be able to adapt to technological developments, understand industry trends, and have flexibility in dealing with dynamic changes. To answer these challenges, universities need to implement innovative educational strategies, such as adopting an *Outcome-Based Education* (OBE)-based curriculum, strengthening collaboration with industry, and integrating digital technology in the learning process. With these steps, educational institutions can be more effective in equipping students with the competencies needed to compete and contribute to the increasingly competitive world of work in the global era (Nurul Hadi, 2023).

In the face of global dynamics and the demands of the ever-evolving world of work, the implementation of an *outcome-based curriculum or Outcome-Based Education* (OBE) is an unavoidable necessity for universities. This approach is oriented towards the learning outcomes achieved by students, not just the delivery of material that must be completed in the lecture process. By implementing OBE, the curriculum can be designed to be more flexible and responsive to the times, including technological advancements, changing industrial needs, and challenges in the era of the Industrial Revolution 4.0. Universities have the freedom to adjust learning methods, evaluation strategies, and learning experiences provided to students to suit the competencies needed in the world of work.

In addition, the OBE approach ensures that each graduate has relevant skills, ranging from problem-solving, critical thinking, effective communication, to adaptability to industry developments. Thus, an OBE-based curriculum not only improves the quality of graduates, but also strengthens their competitiveness at the national and global levels (Anggit Dwi Hartanto, 2022). With the *Outcome-Based Education* (OBE) approach, the learning process is designed to ensure that students achieve the *learning outcomes* that have been set after completing a course, semester, or even an entire study program. This achievement not only focuses on academic aspects, but also includes mastery of science and technology, general skills, skills in the world of work, and *lifelong learning*, which are provisions for students to face future challenges.

The curriculum of OBE-based study programs emphasizes the development and implementation of a curriculum that is oriented towards student learning outcomes. This approach ensures that each element in the curriculum is aligned with the expected competencies. In OBE, there are three main components in the implementation of the curriculum, namely:

1. **Outcomes-Based Curriculum (OBC)**, Designing a curriculum based on clear and measurable learning outcomes, so that each course contributes to the competence of graduates.
2. **Outcomes-Based Learning and Teaching (OBLT)**, Applying learning and teaching methods that focus on the outcomes that students want to achieve, with a more interactive and applicative strategy.

-
3. Outcomes-Based Assessment and Evaluation (OBAE), Conducting results-based assessments and evaluations to ensure that students have truly achieved the set competencies.

One of the fundamental differences in the OBE curriculum is its emphasis on achieving learning outcomes at the end of each course. Lecturers not only deliver material, but also provide special evaluations to students through independent and group assignments to measure their level of understanding. This assessment serves to implement the theory that has been learned into practical skills, so that students really master the competencies that have been set by the study program since the beginning of the curriculum preparation. Thus, the OBE approach allows students to be better prepared to face the world of work and have high competitiveness in various professional fields (Susanto, 2023).

B. Research Methods

The data in this study was obtained through literature studies and interviews with academics and education practitioners to identify important factors in the development of an Outcome-Based Education (OBE)-based curriculum. This method was chosen to obtain the concept, theory, and implementation of OBE in curriculum design to improve the work readiness of graduates. A qualitative approach is used to explore an in-depth understanding of the application of OBE in the world of education.

The data sources in this study were obtained from various literature consisting of academic books that examine OBE, curriculum design, and graduate work readiness, as well as journal articles related to the study topic. In addition, interviews were conducted with a number of education experts and practitioners who have first-hand experience in implementing OBE in higher education institutions.

The data obtained from this literature study and interviews will be analyzed descriptively to obtain a comprehensive picture of the application of OBE in curriculum development, as well as its impact on the work readiness of graduates in the professional world. A semi-structured interview method will be used to collect qualitative data, with questions designed to explore respondents' views on the implementation of OBE in the curriculum and the challenges faced in its implementation. The collected data will then be analyzed using thematic analysis techniques to identify key patterns that are relevant to the purpose of this study.

C. Results of Discussion and Discussion

The *Outcome-Based Education* (OBE)-based curriculum is designed with an emphasis on achieving measurable and concrete learning outcomes. This approach ensures that each educational program is not only oriented to the delivery of the material, but rather to the end result that must be

achieved by the student. Thus, the graduates produced have competencies that are in accordance with the demands of the world of work and are able to make a real contribution to society. One of the key principles in the OBE curriculum is a focus on *outcomes*, which includes mastery of technical skills, in-depth theoretical understanding, and the ability to think critically and adapt to change. This curriculum is also designed to be in line with the needs of the industry, so that graduates have better readiness to enter the world of work. In addition, OBEs emphasize hands-on and hands-on learning, such as industry-based projects, fieldwork, internships, and simulations of the world of work. Evaluation in the OBE system is also carried out on an ongoing basis to measure the extent to which students have achieved the set learning outcomes. With this approach, colleges can ensure that each graduate not only has the academic competencies, but also the practical skills necessary to compete in the increasingly competitive professional world (Mataer, 2023).

The *Outcome-Based Education* (OBE)-based curriculum consists of several key components that are integrated with each other to ensure that graduates have competencies that are in accordance with the needs of the industry and society. These components include:

1. Graduate Learning Outcomes (CPL), the first step in the development of the OBE curriculum is the mapping of graduate learning outcomes that are clear and measurable. CPL includes the identification of attitudes, skills, and knowledge that graduates of a study program must have. This learning objective must be relevant to industry demands, job market developments, and community expectations, and can be measured objectively. Students are expected to be able to show CPL achievements through various learning experiences provided during lectures, both in the form of theory and practice.
2. Learning Design, after establishing learning outcomes, the next step is to design a learning experience that directly leads to the achievement of those goals. In this stage, all elements of the curriculum, including learning materials, teaching methods, and assessment systems, must be carefully selected and arranged to support each other in the development of student competencies. Teaching methods used can include *project-based learning*, *problem-based learning*, practical work, or real-world simulations.
3. Curriculum Focus: Constructive Alignment, the OBE curriculum amplification is carried out through the principle of *Constructive Alignment*, which is a systematic approach that ensures that learning objectives, learning activities, and assessments are aligned with each other. With this approach:
 - a. Learning outcomes are clearly defined from the beginning.
 - b. The learning method is designed to help students achieve these achievements.
 - c. The assessment is carried out to measure the extent to which students have achieved the expected results (Al Aminuddin, 2021).

1. OBE Principles in Curriculum Design

a. Results-Oriented

The OBE approach emphasizes clear and measurable learning outcomes. The main objective of education in OBE is to ensure that graduates have pre-defined competencies. Therefore, every learning activity, from curriculum planning, teaching strategies, to learning evaluation, must be based on the expected learning outcomes. In its implementation, educational institutions must design study programs that lead to applicable skills and knowledge, so that graduates can easily adapt to the world of work (Gusti Ririn, 2024).

b. Flexibility

OBE provides flexibility in curriculum development so that it can adapt to the development of science, technology, and industrial needs. The OBE-based curriculum is not rigid, but dynamic so that it can adapt to changing job market trends and community needs. This flexibility also allows for innovations in teaching methods, such as project-based learning, e-learning, and work experience-based learning. With this approach, students can develop skills that are more relevant to current and future conditions of the world of work.

c. Stakeholder Engagement

One of the main principles of OBE is the involvement of various stakeholders in the curriculum design and evaluation process. The stakeholders in question include academics, industry, government, alumni, and the students themselves. Stakeholder involvement is essential so that the curriculum that is prepared can reflect the real needs in the world of work. For example, through cooperation with industry, educational institutions can identify skills needed by the world of work and adjust the curriculum so that graduates are better prepared to compete in the labor market.

d. Continuous Improvement

The implementation of OBE emphasizes the importance of continuous evaluation and improvement of the curriculum. This improvement is done by collecting data on learning effectiveness, identifying weaknesses in the curriculum, and making necessary adjustments to improve the quality of education. Evaluation can be carried out through feedback from students, lecturers, industry, and tracer study data regarding the success of graduates in the world of work. With continuous improvement, educational institutions can continue to improve the quality of their graduates and ensure that they remain relevant to the needs of the ever-evolving industry.

2. Implementation of OBE in the Higher Education Curriculum

The implementation of OBE in higher education involves several key steps designed to ensure that graduates have the skills and knowledge that are appropriate to the needs of the industry and society. These measures include (Rodin et al., 2024):

a. **Determination of Graduate Profiles**

A graduate profile is a description of the competencies that students must have after completing the study program. These competencies include cognitive (knowledge), affective (attitudes and values), and psychomotor (skills) aspects. Educational institutions must set graduate profiles by taking into account national standards, industry needs, and global trends so that students can adapt to a dynamic work environment.

b. Determination of Learning Outcomes

Learning outcomes are learning outcomes that are expected to be achieved by students at every level of education. These achievements can be grouped into study program learning outcomes (CPL), course learning outcomes (CPMK), and graduate learning outcomes (CPL). Each achievement must be measurable and relevant to the needs of the world of work and reflect the skills required in a particular profession.

c. Preparation of Curriculum Structure

The curriculum structure is arranged based on the learning outcomes that have been determined. Courses are systematically designed to ensure students have a progressive learning experience, from basic understanding to advanced skills. The curriculum structure should also include a combination of theory and practice, so that graduates have skills that can be directly applied in the workforce.

d. OBE Learning Strategies

Encourage the use of active, student-centered learning strategies. Some strategies that can be used include Project-Based Learning, Problem-Based Learning, Work-Based Learning, and flipped classrooms. This strategy allows students to develop critical, collaborative, and innovative thinking skills that are much needed in the world of work.

e. Evaluation and Assessment Evaluation in OBE

Focusing on achieving student learning outcomes. The assessment is carried out formatively and summatively to assess the extent to which students have achieved the learning outcomes that have been set. Some commonly used assessment methods include portfolios, case studies, industry-based projects, presentations, and competency-based exams. The results of the assessment are used to improve the curriculum and teaching methods on an ongoing basis.

3. The Role of Technology in OBE Implementation

Technology plays a crucial role in supporting the implementation of OBE. With the existence of a Learning Management System (LMS), students can access learning materials flexibly. The LMS allows students to interact with lecturers and fellow students through discussion forums, online quizzes, and digital-based evaluations. In addition, LMS also assists educational institutions in monitoring student learning outcomes in real-time. The use of simulation in learning is also growing in OBE (Isropil Siregar et al, 2024). Simulations allow students to experience real-

world scenarios in a safe and controlled environment. For example, medical students can use simulations to practice medical procedures before facing actual patients, while engineering students can test their designs through simulation software before applying them in real projects.

Virtual laboratories are also one of the innovations that support OBE. With the existence of a virtual laboratory, students can conduct experiments and explorations without being limited by the limitations of physical facilities. This is especially helpful in the fields of science, engineering, and technology, where hands-on experiments often require expensive and complex equipment. In addition, technology-based projects provide students with a more real, hands-on experience. By utilizing technologies such as big data, artificial intelligence (AI), and the Internet of Things (IoT), students can work on projects that reflect real-world problems. For example, in a business study program, students can use data analytics to analyze market trends and design more effective business strategies.

Technology also enables gamification-based learning, where game elements such as points, badges, and challenges are used to increase student engagement. In this way, students become more motivated to complete assignments and achieve their learning outcomes. And the application of technology in assessment is also growing. Digital-based evaluations allow for more flexible use of online exams, video-based assignments, and peer assessments. With this system, educational institutions can ensure that assessments are conducted in a more objective and data-driven manner. The use of technology in OBE not only increases the effectiveness of the learning process, but also helps students in developing skills that are relevant to the world of work, so that they are better prepared to face future challenges.

4. Challenges in OBE Implementation

Although it has many benefits, the implementation of OBE also faces several challenges that need to be overcome in order for this system to run effectively. Some of the main challenges in implementing OBE include (Muchammad Ibn Muzakir, 2023):

a. Resistance to Change

The implementation of OBE often faces resistance from various parties, including lecturers, students, and educational institutions. Many lecturers who have become accustomed to traditional teaching methods may find it difficult to adapt to new, more results-oriented approaches. In addition, changes in curriculum and assessment methods often require additional effort, both in terms of time and resources. Therefore, intensive training and socialization is needed to ensure that all stakeholders understand the benefits and importance of OBE.

b. Limited Resources

OBE requires infrastructure, competent teaching staff, and adequate evaluation tools to be implemented effectively. However, not all educational institutions have sufficient resources

to support this implementation. Some colleges may face constraints in terms of funding, laboratory facilities, and access to supporting technologies such as LMS and digital simulations. To address these challenges, educational institutions need to work with industry and governments to secure the financial support and access to the necessary technologies.

c. **Difficulties in Measuring Learning Outcomes**

One of the biggest challenges in OBE is ensuring that expected learning outcomes can be measured in an accurate and objective way. Learning outcomes often include complex skills such as problem-solving, critical thinking, and collaboration, which are not always easy to measure quantitatively. Therefore, more innovative assessment methods are needed, such as digital portfolios, industry-based case studies, and project-based assessments. In addition, educational institutions need to develop clear indicators and consistent evaluation standards so that the assessment process can be carried out effectively.

Although there are various challenges in the implementation of OBE, these challenges can be overcome through the right strategies, such as increasing training for educators, optimizing the use of technology, and cooperation between academics, industry, and the government. Thus, the OBE system can be effectively implemented to improve the quality of education and ensure more job-ready graduates.

5. The Impact of OBE on Graduate Job Readiness

By applying for OBE, graduates are expected to have skills that match the needs of the industry, including technical skills, communication skills, critical thinking skills, and adaptability. OBE also helps to increase student engagement in the learning process, so they are better prepared for the dynamic world of work. Research shows that graduates who come from institutions that apply OBE are more likely to get jobs compared to those who come from institutions with traditional educational models. Outcome-Based Education (OBE) has a significant impact on the job readiness of graduates by ensuring that they have the skills, knowledge, and attitudes needed in the industrial world. Here are some of the main impacts of OBE on the work readiness of graduates (Farah Rizki Deswanda Gea, 2024):

a. **Improving Professional Competencies**

With OBE, graduates are equipped with skills that match the demands of the workforce, including critical thinking skills, effective communication, problem-solving, and teamwork. OBE-based study programs are designed to provide practical experience that supports the mastery of essential technical and non-technical competencies for graduates to adapt to a dynamic work environment.

b. Readiness to Face Industry Challenges

OBEs encourage project-based learning, internships, and collaboration with industry, allowing students to gain hands-on insight into the world of work. This increases their readiness to face real challenges in the workplace and helps in accelerating their transition from an academic environment to a professional environment.

c. Increased Employability

Because the OBE curriculum is designed around the needs of the industry, graduates tend to have a competitive advantage in the labor market. They are more likely to be accepted in various job sectors because they already have skills that have been validated by the industry. In addition, many institutions implement tracer studies to assess the level of involvement of graduates in the world of work, which is then used to continuously update the curriculum to stay relevant.

d. Strengthening Soft Skills and Adaptability

In addition to technical skills, OBE also emphasizes the importance of soft skills such as leadership, time management, creativity, and the ability to work in multicultural teams. With results-based learning, students are accustomed to work situations that require high flexibility and adaptability.

e. Connectivity with Industry and the World of Work

OBE implementation often involves collaboration with industry through internships, joint research, and industry-based projects. This allows students to build professional networks before they graduate, making it easier for them to find a job that fits their field of study.

Outcome-Based Education has a significant positive impact on the job readiness of graduates by ensuring that they have competencies that are appropriate to the needs of the labor market. With a structured and outcome-based approach, the resulting graduates are better prepared to face the challenges of the world of work and contribute effectively in their professional environment.

D. Conclusion

The implementation of Outcome-Based Education (OBE) in the design of the higher education curriculum makes a significant contribution to improving the work readiness of graduates. By focusing on measurable learning outcomes, OBE ensures that graduates have the skills and knowledge that match the demands of the industry. OBE's principles, such as outcome-orientedness, flexibility, stakeholder engagement, and continuous improvement, form a solid foundation for the development of a relevant and dynamic curriculum.

In its implementation, OBE requires educational institutions to design graduate profiles that include cognitive, affective, and psychomotor competencies, as well as to compile clear and measurable learning outcomes. The development of a curriculum structure that includes a combination of theory and practice and the application of various innovative learning strategies, such as project-based learning, problem-based learning, and the use of technology in evaluation and assessment, further strengthens the positive impact of OBE. However, the implementation of OBE also faces challenges, such as resistance to change, limited resources, and difficulties in measuring learning outcomes. This challenge requires solutions that involve training educators, more optimal use of technology, and closer collaboration between academia, industry, and government.

The impact of OBE on the work readiness of graduates has proven to be significant, with an increase in professional competence, readiness to face industry challenges, increased employability, and strengthening soft skills and adaptability. Therefore, OBE not only improves the quality of education, but also ensures graduates are better prepared and relevant to the ever-evolving needs of the workforce. The implementation of OBE is expected to continue to be strengthened to create graduates who are competent, ready to adapt, and able to compete in the global job market.

E. References

- Abd Malek, Nor Mohd Syamsi, Mohamad Khir Johari Jamaludin, and Muhammad Ridhwan Ishak. "Culture of Industrial Revolution 4.0 (IR4.0) Manufacturing Technology Certificate Programme, Malaysian Community College." In *the 2024, 2024, 2024 Lifelong Learning Seminar*.
- Aminuddin, A. (2021). E-OBE application for the integration of OBE (Outcome-Based Education) curriculum components. *Journal of Information Systems*.
- Fiandi, A. (2023). The concept of Outcome Based Education (OBE) in educational institutions. *Journal of Educational Research*, 73-77.
- Hadi, N. (2023). *Outcome-Based Education (OBE)-Based Curriculum, the Key to Islamic Universities in Global Competition*. Madura.
- Hartanto, A. D. (2022). *OBE-Based Curriculum Guide*. Yogyakarta: Association of Higher Education in Informatics and Computers (APTIKOM).
- Gea, Farah Rizki Deswanda, and Sherly Feliza Koto. "The Effectiveness of the Outcome-Based Education (OBE) Curriculum in Improving Student Competence in Bakery Courses: A Meta-Analysis." *MODELING: Journal of PGMI Study Program* 11, no. 4 (2024): 232-249.
- Gusti, Ririn. *Development of OBE-Based RPS in Islamic Religion Courses at the University of Bengkulu*. Dissertation, UIN Fatmawati Sukarno Bengkulu, 2024.
- Mataer. (2022). Getting to Know More About the Outcome-Based Education (OBE) Curriculum.
- Muzakir, Muchammad Ibnu. "Implementation of the Outcome Based Education (OBE) Curriculum in the Higher Education System in the Era of the Industrial Revolution 4.0." *Education: Journal of Islamic Education* 2, no. 1 (2023): 118-139.
- Rahmah, R. A. (2023). *Outcome-Based Classroom Management Based Education*. Yogyakarta: Nas Media Pustaka.

-
- Rodin, Rhoni, Idi Warsah, and Jumira Warlizasusi. "Strengthening MBKM through the revitalization of the Outcome-Based Education Curriculum in the Islamic Education Management Study Program." *El-Idare: Journal of Islamic Education Management* 10, no. 2 (2024): 189-199.
- Siregar, Isropil, et al. "Global Issues of Independent Curriculum Development and Life Skill Apprenticeship of World Class Education." *Journal of Education and Teaching Review (JRPP)* 7, no. 4 (2024): 12887-12895.
- Susanto. (2023). *Implementation of the Outcome Based Education (OBE) Curriculum in the Higher Education System in the Era of the Industrial Revolution 4.0*. Jakarta.