

Development Of An Internship Model Using Outcome-Based Education (Obe) Curriculum

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Abstract

This study aims to develop an internship model based on the Outcome-Based Education (OBE) curriculum tailored to the needs of higher education institutions. The research adopts a Research and Development (R&D) approach using the INOBEL (Integrative Outcome-Based Education for Learning Outcomes) development model, which includes stages such as needs exploration, design, development, implementation, and evaluation. INOBEL was reconstructed from established models such as Borg and Gall, ADDIE, 4D, Dick and Carey, and DBR. The subjects involved in this study included students, academic supervisors, and industry partners. Data collection techniques included interviews, observations, documentation, and questionnaires, while data analysis was conducted both quantitatively and qualitatively. The results showed that the OBE-based internship model met the criteria of validity, practicality, and effectiveness in enhancing students' soft skills and hard skills. It also fostered collaboration between universities and industries, producing tangible outputs such as internship reports, scientific journals, or products eligible for intellectual property rights (HaKI). The study recommends disseminating the model among academic supervisors and implementing it more broadly within higher education institutions.

Keywords: OBE Curriculum, Internship, MBKM, Model Development



INTRODUCTION

Collaboration among universities, industries, and the government is crucial in developing human resources capable of adapting to and innovating within a knowledge-based economy (Etzkowitz & Leydesdorff, 1995). In Indonesia, policies such as Link and Match and Merdeka Belajar–Kampus Merdeka (MBKM) emphasize the importance of synergy to address the mismatch between graduates and labor market demands (Azman et al., 2020; Wikan, 2021).

Graduates often face competency gaps not only in technical skills (hard skills) but also in non-technical skills (soft skills), such as communication, teamwork, and problem-solving abilities (B. Bandanadjaja, 2021; Yahya et al., 2020). Moreover, traditional campus-based learning approaches have yet to fully provide relevant real-world work experiences (Ngo & Phan, 2019; Rais et al., 2021). Many existing internship programs are ineffective, with students often assigned administrative tasks unrelated to their fields of study (Anggiat Sinaga, 2021).

The Outcome-Based Education (OBE) curriculum, which emphasizes measurable learning outcomes, offers a promising alternative. Unlike conventional curricula focused solely on content delivery, OBE defines educational goals based on competencies that students must demonstrate upon graduation (Shaheen, 2019; Spady, 1994). Implementing OBE in internships enables students not only to understand workplace dynamics but also to produce tangible outputs beneficial to partner industries, such as digital products or academic articles (Junaedi et al., 2020; Muzakir & Susanto, 2023).

This study aims to design and test an OBE-based internship model suitable for the Information Systems and Technology Study Program at Nobel Indonesia Institute of Technology and Business. Its primary focus is aligning the curriculum, industry needs, and higher education policies to produce competent and job-ready graduates.

RESEARCH METHOD

This study employed a Research and Development (R&D) methodology using the INOBEL (Integrative Outcome-Based Education for Learning Outcomes) model, which consists of five phases: needs exploration, design, development, implementation, and evaluation. INOBEL was developed through the reconstruction of well-known instructional design models such as Borg and Gall, ADDIE, 4D, Dick and Carey, and Design-Based Research (DBR) (Agunawan, 2020).

The research subjects included students, academic supervisors, and industry partners. The study was conducted at the Nobel Indonesia Institute of Technology and Business, as well as internship sites. Participants included 30 students enrolled in the MBKM internship program,



academic supervisors, and industry partners hosting the interns. Purposive sampling was used to select participants directly involved in internship execution and OBE curriculum implementation.

Instruments used in data collection included questionnaires, observation sheets, assessment rubrics, and interview guides. Qualitative and quantitative data analyses were performed. Instrument validity and reliability were tested using Percent Agreement, with a minimum agreement threshold of $\geq 70\%$ among validators (Sugiyono, 2012).

RESULTS AND DISCUSSION

Needs Exploration and Context Analysis

Findings indicated that students desired authentic work experiences, skill development, and tangible outputs recognized as final projects. Industry partners emphasized the need for technical competencies, soft skills, and outcome-oriented performance. Institutional analysis revealed the necessity for output-based assessment standards and supervisor readiness. These findings formed the foundation for designing a context-specific model (Galbraith & Mondal, 2021).

Initial Model Design and Development

The initial model consisted of five components: input, process, output, evaluation, and impact. Documents developed included the OBE internship curriculum, supervision guidelines, assessment instruments, and formats for proposals and reports. The design followed constructive alignment principles and was flexible across study programs.

A collaborative approach involving universities and industries initiated the model, starting with a Memorandum of Understanding (MoU), followed by agreements on schedules, outputs, and supervision. Academic supervisors were selected based on relevant expertise, while field supervisors were appointed by industry partners. Outputs included internship reports, scientific articles, and/or HaKI-eligible products, which could be used as alternatives to traditional thesis requirements (Permendikbudristek, 2023).

Expert Validation and Refinement

The model received validation from six experts with an average validity score of 86.36%, indicating strong alignment with OBE principles, logical structure, and compatibility with MBKM policies. All instruments demonstrated high reliability (Percent Agreement ≥ 0.70). Revisions focused on refining rubric language, monitoring systems, and learning outcome adjustments.



Implementation and Revision

The model was piloted with 10 participants and later expanded to 30 participants across multiple study programs. The implementation feasibility averaged 1.92 out of 2, indicating successful execution. Student, faculty, and industry responses confirmed the model's practicality and effectiveness in achieving relevant learning outcomes. Challenges included time synchronization and varying levels of industrial readiness. Revisions were made to the logbook, proposal format, and soft skills training modules.

Evaluation and Dissemination

Evaluation results showed improved learning outcomes (average >3.6 out of 4) and high user satisfaction (90% reported satisfaction). Dissemination can occur internally via campus policies and MBKM curriculum integration or externally through seminars, journals, and LLDIKTI forums. The model is deemed sustainable and recommended as a best practice for other higher education institutions, especially those implementing OBE curricula.

DISCUSSION

The findings confirm that implementing an OBE-based internship model effectively bridges the gap between higher education and the workforce (Zulkifli et al., 2022). OBE enables the integration of curriculum and industry needs through clearly defined and measurable learning outcomes. This aligns with studies by (Bawica, 2021) and (Jolo et al., 2023), which show that structured internships with specific learning outcomes enhance graduate employability.

Designing internships as part of final projects increases academic and professional relevance for students. Additionally, tangible outputs such as products or intellectual property strengthen the outcome-based approach central to OBE (Aruna, 2020; Spady, 1994).

From a practical perspective, the social system and institutional-industry support functioned effectively. Students reported being adequately supported in terms of guidance, team collaboration, and output documentation. Partner companies acknowledged the program's value in delivering innovative contributions and potential post-internship recruitment opportunities, supporting initiatives like link and super-match and the super tax deduction policy (Kemenkeu No. 128/PMK.010/2019).

Instructionally, students experienced growth in knowledge, skills, and professional attitudes. The internship experience also led to increased confidence, career maturity, and active participation in professional communities (Agunawan & Paula, 2023).



CONCLUSION

This study produced a valid, practical, and effective OBE-based internship model suitable for vocational higher education, particularly for the Information Systems and Technology Study Program. Key findings include:

1. The main needs identified for the OBE internship model were strengthening soft skills (discipline, responsibility, work ethic) and hard skills (information technology and problem-solving), as expressed by students and industry partners.
2. The OBE internship model was designed based on university-industry collaboration through MoUs, output agreements, and relevant supervision. Outputs included reports, scientific articles, or innovative products recognized as final projects.
3. The model was validated theoretically and empirically, with a validity rate of 86.36% and high instrument reliability. Pilot testing confirmed its effectiveness and practicality.
4. Model effectiveness was demonstrated through improved student learning outcomes, active industry engagement, and recognition of internship outputs as academic and professional achievements.

RECOMMENDATIONS

1. For higher education institutions, this model can serve as a foundational framework for structured internships oriented toward learning outcomes and final project recognition, particularly in vocational programs.
2. Institutions should build stronger partnerships with industries to ensure program sustainability and curriculum relevance.
3. For academic supervisors, the model provides a contextual pedagogical approach to guide students in facing workplace challenges through hands-on practice and professional output development.
4. For industry partners, the model offers tangible benefits through student innovation and fiscal incentives via the super tax deduction program.
5. Future research should explore the model's applicability across various disciplines and develop an integrated digital information system to support OBE-based internship assessments.



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