AL-TANZIM Jurnal Manajemen Pendidikan Islam
e-ISSN : 2549-5720
p-ISSN : 2549-3663
Al-Tanzim: Jurnal Manajemen Pendidikan Islam
Vol. 10 No. 03 (2026) : 879-892
Available online at https://ejournal.unuja.ac.id/index.php/al-tanzim/index

From Policy to Practice: Evaluating the Alignment and Disconnect in Outcome-Based Education Curriculum

Mahalli[1*], Aliva Rosdiana[2], Arti Lata[3]
[1]Islamic Education Department, Universitas Islam Nahdlatul Ulama Jepara, Central Java, Indonesia
[2]English Language Education Department, Universitas Islam Nahdlatul Ulama Jepara, Central Java, Indonesia
[3]Business Management and Digital Innovation Department, University of Technology and Entrepreneurship, Cambodia
Email: mahalli11@unisnu.ac.id[1], alivarosdiana@unisnu.ac.id[2], alata@ute.ac[3]

DOI: http://doi.org/10.33650/al-tanzim.v10i3.14272

Received: 21 January 2026	*Revised: 01 May 2026*	*Accepted: 29 May 2026*

Abstract:

Outcome-Based Education (OBE) is a curriculum approach that emphasises alignment between graduate learning outcomes, the learning process, and assessment. This study aims to analyse the alignment of curriculum implementation with OBE principles at the design and implementation stages. This study used a qualitative evaluative approach to assess the suitability of the OBE-based curriculum. Data were obtained from 25 RPS (Lecture Plans), a survey of 5 study program heads, academic literature, and national policy documents. Qualitative content analysis was conducted to assess the alignment of CPL (Competency Plans), CPMK (Competency Planning), learning activities, and assessments with OBE principles. The results showed that the curriculum at the design stage was generally aligned with OBE principles. However, inconsistencies were still found during implementation, particularly in learning and assessment, which did not fully reflect student-centred learning and authentic assessment. These findings indicate a gap between curriculum planning and implementation. The contribution of this study is to provide empirical evidence regarding the gap in OBE implementation at the study program level. This implies the need to strengthen lecturer competencies through ongoing training and outcome-based curriculum evaluation.

Keywords: *Outcome-Based Education, Curriculum Alignment, Authentic Assessment*

Abstrak:

Outcome-Based Education (OBE) merupakan pendekatan kurikulum yang menekankan keselarasan antara capaian pembelajaran lulusan, proses pembelajaran, dan penilaian. Penelitian ini bertujuan untuk menganalisis keselarasan implementasi kurikulum dengan prinsip OBE pada tahap desain dan pelaksanaan. Penelitian ini menggunakan pendekatan kualitatif evaluatif untuk menilai kesesuaian kurikulum berbasis OBE. Data diperoleh dari 25 RPS, survei 5 kepala program studi, literatur akademik, dan dokumen kebijakan nasional. Analisis dilakukan melalui content analysis kualitatif untuk mengkaji kesesuaian CPL, CPMK, aktivitas pembelajaran, dan penilaian dengan prinsip OBE. Hasil penelitian menunjukkan bahwa kurikulum pada tahap desain umumnya telah selaras dengan prinsip OBE, namun pada tahap implementasi masih ditemukan ketidaksesuaian terutama dalam pembelajaran dan penilaian yang belum sepenuhnya mencerminkan pembelajaran berpusat pada mahasiswa dan asesmen autentik. Temuan ini menunjukkan adanya kesenjangan antara perencanaan kurikulum dan pelaksanaannya. Kontribusi penelitian ini adalah memberikan bukti empiris mengenai kesenjangan implementasi OBE

This journal is an open-access article under a CC BY-NC-SA 4.0 license. © 2026, the author(s)

pada tingkat program studi. Implikasinya, diperlukan penguatan kompetensi dosen melalui pelatihan berkelanjutan dan evaluasi kurikulum berbasis luaran.
Kunci: *Outcome-Based Education, Keselarasan Kurikulum, Asesmen Autentik*

Please cite this article in APA style as:

Mahalli, Rosdiana, A., & Lata, A. (2026). From Policy to Practice: Evaluating the Alignment and Disconnect in Outcome-Based Education Curriculum. *Al-Tanzim: Jurnal Manajemen Pendidikan Islam*, *10*(3), 879-892s.

INTRODUCTION

Higher education institutions are increasingly required to produce graduates who are not only academically competent but also capable of responding to complex societal and labour market demands. In the era of globalisation and rapid technological change, universities play a strategic role in shaping human resources that are adaptive, innovative, and competitive (Chaika, 2025; Napathorn, 2022; Sharma et al., 2023). This expectation arises from the growing mismatch between graduate competencies and industry needs, a global concern in higher education systems. Evidence from various reports indicates that employers often find graduates lacking in critical thinking, problem-solving, and practical skills required in professional settings. Therefore, curriculum reform becomes essential to ensure that higher education outcomes are relevant to societal transformation (García et al., 2024; Umarji et al., 2022). One widely adopted reform approach is Outcome-Based Education (OBE), which emphasises clearly defined learning outcomes as the foundation of curriculum design, implementation, and assessment in higher education systems worldwide.

Despite widespread adoption of Outcome-Based Education (OBE), its implementation in many higher education institutions continues to face significant operational challenges (Pinto et al., 2024; Rhee et al., 2021). In practice, there is often a gap between curriculum design and classroom implementation. Many lecturers continue to rely on conventional, teacher-centred approaches that emphasise content delivery rather than student-centred learning. In addition, assessment practices are frequently misaligned with intended learning outcomes, with a heavy reliance on written examinations rather than authentic assessment methods (Kahn, 2023; Slade et al., 2022). Preliminary observations also indicate inconsistencies in the formulation of Course Learning Outcomes (CPMK) and their alignment with learning activities and assessment indicators. As a result, students do not always demonstrate the expected competencies outlined in the curriculum.

Previous studies have extensively discussed challenges in implementing Outcome-Based Education. Tobondo (2023) emphasises that the lecturer's understanding plays a critical role in determining the success of OBE implementation. Jablonska (2022) and Owen et al. 2020) highlight issues related to lecturer readiness and pedagogical transition from content-based to outcome-based instruction. Similarly, Schwartz et al. (2025), Ha et al. (2021), and Huang et al. (2025) report that limited training and institutional support hinder effective implementation of OBE in higher education. Tröhler (2021), Faizah (2023), and Massó et al. (2021) further explain that curriculum transformation requires strong alignment between learning outcomes, assessment systems, and institutional infrastructure. Although these studies provide important insights, most of them

focus on general implementation challenges or lecturer perceptions rather than systematically examining the alignment between curriculum documents and instructional practices.

Recent developments in OBE research have increasingly emphasised the importance of constructive alignment between learning outcomes, teaching activities, and assessment strategies. However, most existing studies still tend to examine these components separately rather than as an integrated system. In addition, limited research has examined how OBE principles are operationalised simultaneously at both the curriculum design and implementation stages within higher education institutions (Kadam et al., 2020; Li, 2024; Umarji et al., 2022). This gap is particularly evident in studies conducted in developing country contexts, where curriculum reform is often driven by policy compliance rather than deep pedagogical transformation. As a result, there is a need for more comprehensive evaluative studies that examine not only whether OBE principles are adopted at the document level, but also whether they are effectively implemented in classroom practice. Addressing this gap is essential to understanding the real effectiveness of OBE-based curriculum reforms in improving graduate competencies.

Based on the identified gaps, the main problem addressed in this study is the inconsistency between OBE-based curriculum design and its implementation in higher education practice. Specifically, there is limited empirical evidence on how far curriculum documents such as CPL, CPMK, and RPS align with OBE principles, and how these alignments are reflected in actual teaching and assessment practices. Furthermore, there is a lack of a systematic evaluation that integrates document analysis and stakeholder perspectives to assess curriculum alignment. Therefore, this study seeks to investigate the extent to which curriculum design and implementation align with OBE principles and to identify factors that support and hinder this alignment at the study program level.

This study argues that the successful implementation of Outcome-Based Education does not depend solely on curriculum documentation but also requires coherence between design, instructional practice, and assessment implementation, supported by lecturer competence and institutional systems. The originality of this research lies in its integrated evaluative approach that combines document analysis of RPS with supporting survey data from program leaders to assess curriculum alignment with OBE principles. Unlike previous studies that focus mainly on conceptual or perception-based analysis, this study provides a more comprehensive evaluation of curriculum alignment at both design and implementation levels. The contribution of this study is to provide empirical evidence on the gaps in OBE implementation and to offer insights for improving curriculum quality assurance in higher education. Accordingly, the research questions are: (1) To what extent does curriculum design align with OBE principles? (2) To what extent does curriculum implementation reflect OBE principles? (3) What factors support and hinder the implementation of OBE in higher education?

RESEARCH METHODS

This study employs a qualitative evaluative approach, using document analysis supported by survey data, to examine the alignment of Outcome-Based Education (OBE) curriculum implementation (Maharani et al., 2023). The combination of methods provides a more comprehensive understanding of both curriculum design and its implementation. The primary data sources consist of 25 Semester Learning Plans (RPS) and supporting survey responses from 5 heads of study programs.

The RPS documents were purposively selected because they represent a combination of core courses and supporting courses within the study program curriculum, ensuring variation in course characteristics and learning outcomes. The study focuses on curriculum documents that include Graduate Learning Outcomes (CPL), Course Learning Outcomes (CPMK), learning activities, and assessment components. In addition, recent academic literature and national policy documents are used as supporting data to strengthen interpretation.

To evaluate curriculum alignment, the researcher developed an analytical rubric based on Outcome-Based Education principles proposed by Wu et al. (2024) and the constructive alignment framework by Hill et al. (2021). The rubric consists of five key indicators: (1) clarity of focus, measured by the measurability of CPL; (2) backward design, assessed through the alignment between CPL and CPMK; (3) constructive alignment, evaluated through consistency between CPMK, learning activities, and assessment; (4) high expectations, reflected in the level of cognitive demand in learning outcomes; and (5) expanded learning opportunities, indicated by the presence of student-centered and flexible learning strategies.

Table 1. Analytical Rubric for Assessing OBE-Based Curriculum Alignment

OBE Principle	Indicator
Clarity of Focus	CPL formulated in measurable and observable terms
Backward Design	CPMK derived systematically from CPL
Constructive Alignment	Alignment between CPMK, learning activities, and assessment
High Expectations	Learning outcomes reflect higher-order thinking skills
Expanded Opportunities	Use of student-centered learning strategies

Data analysis was conducted using qualitative content analysis (Im et al., 2023). The analysis process followed three stages: (1) open coding, in which curriculum documents were examined to identify relevant OBE elements; (2) axial coding, where codes were grouped based on OBE principles and alignment categories; and (3) thematic interpretation, where patterns of alignment and misalignment were identified and interpreted using Spady's OBE theory and Biggs' constructive alignment framework. Each CPL, CPMK, learning activity, and assessment component was systematically analysed to determine its alignment with OBE principles.

To ensure the validity of the findings, this study employs methodological triangulation, combining document analysis and survey data, and theoretical triangulation using Spady's Outcome-Based Education framework and Biggs' Constructive Alignment theory. Source triangulation is also applied by comparing curriculum documents, survey responses, and national policy documents such as the Indonesian National Higher Education Standards (SN-Dikti) and curriculum

guidelines. This multi-level triangulation enhances the credibility and trustworthiness of the analysis. Finally, the analysis results were interpreted by comparing findings from both the national and international literature on OBE implementation to ensure consistency and deepen the study's analytical depth.

RESULTS AND DISCUSSION

Results

This section presents the results and discussion of the study on curriculum alignment within an Outcome-Based Education framework. It provides an overview of the relationships between CPL, CPMK, learning activities, and assessment practices. The following discussion interprets the findings in relation to relevant literature, highlighting theoretical implications, practical significance, and the contribution of this research to curriculum development in higher education.

Results of Document Analysis

The curriculum development process in the study program follows a systematic sequence consisting of: (1) focus group discussions (FGD) for needs analysis and vision formulation, (2) formulation of graduate profiles, (3) formulation of Graduate Learning Outcomes (CPL), (4) mapping CPL to courses, and (5) development of Course Learning Outcomes (CPMK) and sub-CPMK. This structured process reflects an initial attempt to implement Outcome-Based Education (OBE) principles in curriculum design. To ensure consistency in evaluating curriculum alignment, this study applies a scoring rubric based on OBE principles.

Table 2. Curriculum Alignment Scoring Rubric

Score Range	Category
81–100	Very Appropriate (SS)
61–80	Appropriate (S)
41–60	Less Appropriate (KS)
21–40	Not Appropriate (TS)
0–20	Very Inappropriate (STS)

This rubric is used consistently across all curriculum components, including CPL, CPMK, learning activities, and assessment systems. Each document was analyzed using qualitative content analysis and assigned a category based on the degree of alignment with OBE principles.

Alignment between CPL and Graduate Profile

This section presents the findings of the study on the alignment between Course Learning Outcomes (CPL) and the Graduate Profile. The analysis was conducted to evaluate the consistency and relevance between intended learning outcomes and expected graduate competencies, providing a basis for improving curriculum quality within an Outcome-Based Education framework.

Table 3. Percentage of Alignment between CPL and Graduate Profile

No	Level of Alignment	Number of Courses	%
1	Very Appropriate (SS)	0	0
2	Appropriate (S)	19	76
3	Less Appropriate (KS)	6	24
4	Not Appropriate (TS)	0	0
5	Very Inappropriate (STS)	0	0
Total		**25**	**100**

Table 3 shows that the analysis indicates that most CPL formulations fall within the "Appropriate" category. For example, CPL statements such as "graduates can apply educational theories in instructional design contexts" clearly align with graduate profiles that emphasise pedagogical competence. However, CPLs such as "graduates understand educational theories" were categorised as less appropriate due to their low measurability and lack of observable indicators. This shows that although CPL formulation has generally followed OBE principles, some outcomes still reflect cognitive-level understanding rather than competency-based formulation.

Alignment between CPMK and Sub-CPMK

This section presents the findings in Table 3 regarding the alignment between Course Learning Outcomes (CPMK) and Sub-Course Learning Outcomes (Sub-CPMK). The analysis aims to examine the consistency and coherence between course-level outcomes and their more specific learning indicators, which serve as an important basis for ensuring structured curriculum implementation within an Outcome-Based Education framework.

Table 4. Alignment between CPMK and Sub-CPMK

No	Level of Alignment	Number of Courses	%
1	Very Appropriate (SS)	4	16
2	Appropriate (S)	13	52
3	Less Appropriate (KS)	5	20
4	Not Appropriate (TS)	3	12
5	Very Inappropriate (STS)	0	0
Total		**25**	**100**

Table 4 indicates that CPMK–sub-CPMK alignment is generally adequate. However, several sub-CPMK statements remain unmeasurable and lack operational verbs. For instance, some syllabi state “students understand curriculum concepts”, which does not specify observable performance. In contrast, well-aligned CPMK use measurable verbs such as analyse, design, evaluate, and develop. This inconsistency suggests that OBE translation at the course level is not yet fully standardised among lecturers.

Alignment of Learning Activities (KBM)

This section presents the findings in Table 4 on the alignment of learning activities. The analysis focuses on how instructional activities are designed and implemented in relation to the intended learning outcomes, ensuring that teaching strategies are coherent, student-centered, and supportive of achieving the expected competencies within an Outcome-Based Education framework.

Table 5. Alignment of Learning Activities

No	Level of Alignment	Number of Courses	%
1	Very Appropriate (SS)	0	0
2	Appropriate (S)	17	68
3	Less Appropriate (KS)	7	28
4	Not Appropriate (TS)	1	4
5	Very Inappropriate (STS)	0	0
Total		**25**	**100**

Table 5 summarises the alignment of teaching and learning activities (KBM) formulated in the RPS. 68% of KBM formulations align with OBE principles. However, 4% are not aligned, and 28% are less aligned, particularly because learning activities have not fully adopted student-centred approaches such as Case-Based Learning (CBL) and Project-Based Learning (PBL), which are effective in facilitating the achievement of graduate learning outcomes.

Learning activities show moderate alignment with OBE principles. Courses categorised as "Appropriate" generally apply student-centred approaches such as Project-Based Learning (PBL) and Case-Based Learning (CBL). For example, learning activities such as group-based curriculum design projects and case analysis of instructional problems reflect constructive alignment. However, several courses still rely on lecture-based instruction. Lectures and question-and-answer sessions dominate some syllabi, indicating limited implementation of active learning strategies. This suggests that while OBE principles are present in documents, their pedagogical translation remains inconsistent.

Alignment of Assessment Activities

This section presents the findings on the alignment of assessment activities, as shown in Table 6. The analysis examines the consistency between assessment methods and the intended learning outcomes, ensuring that evaluation strategies accurately measure students' achievement of competencies within an Outcome-Based Education framework.

Table 6. Alignment of Assessment Activities

No	Level of Alignment	Number of Courses	%
1	Very Appropriate (SS)	0	0
2	Appropriate (S)	7	28
3	Less Appropriate (KS)	16	64
4	Not Appropriate (TS)	2	8
5	Very Inappropriate (STS)	0	0
Total		**25**	**100**

Based on Table 6, it can be concluded that most learning evaluation activities are less aligned with OBE principles. Only 28% of evaluation activities are aligned with OBE. Most evaluation practices rely heavily on written examinations as the primary assessment instrument. Performance-based assessments, such as projects, presentations, portfolios, and rubric-based evaluations, designed to measure students' understanding and application skills comprehensively, are not widely utilised.

This condition indicates that assessment practices are still predominantly oriented toward measuring students' cognitive mastery at the recall and comprehension levels rather than assessing authentic competencies and learning outcomes targeted in OBE. The continued reliance on written examinations may be influenced not only by practical considerations such as efficiency, large class sizes, and administrative convenience, but also by lecturers' limited assessment literacy in designing authentic, outcome-oriented evaluation methods. Assessment literacy refers to lecturers' knowledge and skills in developing valid, reliable, and aligned assessment strategies that accurately measure intended learning outcomes.

Assessment practices demonstrate the lowest level of alignment among all components. Most courses still rely on written examinations as the dominant assessment method. For example, assessment descriptions such as "final written test to measure student understanding" indicate a focus on recall-level cognition. In contrast, OBE-aligned assessment should include authentic evaluation such as portfolios, performance tasks, presentations, and rubric-based evaluation. Only a small number of courses explicitly include statements such as "students are assessed through project-based curriculum design and reflective portfolio submission". This indicates that assessment literacy among lecturers remains a key challenge in implementing OBE.

Interpretation of Alignment Patterns

The dominance of the "Appropriate" category across CPL, CPMK, and KBM indicates that curriculum documents have generally adopted OBE principles at a formal level. However, the absence of a strong "Very Appropriate" category suggests that curriculum alignment is still largely procedural rather than deeply pedagogical.

This finding indicates that OBE implementation tends to be document-oriented, particularly driven by accreditation requirements, rather than fully integrated into instructional practice. According to constructive alignment theory, true curriculum quality is achieved only when learning outcomes, teaching activities, and assessment systems function coherently. Therefore, partial alignment at the document level does not necessarily guarantee effective learning implementation.

Survey Results

Based on questionnaire data collected from heads of study programs regarding supporting and inhibiting factors in OBE curriculum development and implementation, the following findings were obtained.

Supporting Factors

All respondents stated that national policies such as the Indonesian National Qualifications Framework (KKNI), the National Standards for Higher Education (SN-DIKTI), and the implementation of Merdeka Belajar–Kampus Merdeka (MBKM) provide clear guidance for higher education institutions to implement OBE-based curricula. These regulations establish graduate learning outcomes (CPL) aligned with labour market needs and international standards.

Several respondents added that institutional support serves as a significant enabling factor, particularly facilitation from the Institute for Educational Development and Innovation (LPPI) and the Quality Assurance Institute (LPM), which consistently assist study programs in developing OBE-based curricula. Input from graduate users, alums, professional associations, and industry also supports curriculum development by ensuring that CPL remain relevant to real-world needs, thereby enhancing graduate quality and competitiveness.

Inhibiting Factors

Most respondents indicated that inhibiting factors in OBE curriculum development and implementation primarily stem from lecturers' human resources. Many lecturers have not yet developed a comprehensive and in-depth understanding of OBE principles and their implementation in teaching and learning. OBE is often perceived merely as a change in curriculum document format rather than a paradigm shift toward outcome-oriented learning. This misunderstanding affects the development of syllabi and RPS that are not fully aligned with OBE principles.

The main inhibiting factor is lecturers' limited understanding of OBE principles. Many lecturers interpret OBE as a documentation requirement rather than a pedagogical transformation. This results in partial alignment between CPL, CPMK, learning activities, and assessment practices. Another issue is limited assessment literacy, particularly in designing authentic assessment. Lecturers tend to rely on traditional written examinations for familiarity and efficiency.

Discussion

The findings of this study indicate that curriculum alignment across CPL, CPMK, learning activities, and assessment practices is generally categorised as "Appropriate," showing that Outcome-Based Education (OBE) principles have been formally adopted in curriculum documents. This is consistent with previous studies by Ebm et al. (2024) on constructive alignment, which emphasise that learning outcomes, teaching activities, and assessment should be coherently designed. However, unlike an ideal OBE implementation, this study reveals a lack of strong "Very Appropriate" alignment, suggesting that OBE integration is still at a procedural level rather than fully embedded in pedagogical practice.

In terms of CPL and graduate profile alignment, the results show strong consistency, with most CPLs appropriately aligned with expected graduate competencies. This finding supports the view of Ihsan et al. (2021) and Karakostas et al. (2020) that OBE requires clear articulation of competencies that reflect real-world performance. However, some CPL statements remain at the level of general knowledge rather than measurable competencies, which contrasts with OBE

principles that emphasise observable and assessable outcomes (Guo et al., 2022; Li et al., 2021). This indicates a gap between theoretical expectations of OBE and its practical formulation in curriculum documents.

For CPMK, Sub-CPMK, and learning activities, the study found moderate alignment, but inconsistencies remain in operationalisation. Learning activities such as Project-Based Learning (PBL) and Case-Based Learning (CBL) are already implemented in several courses, aligning with constructivist learning theory, which emphasises active, student-centred learning (Benlaghrissi et al., 2024; Crespí et al., 2022). Nevertheless, the continued dominance of lecture-based instruction in some courses reflects findings from prior research that OBE implementation often faces resistance due to traditional teaching habits (García et al., 2024; Kadam et al., 2020). This suggests that pedagogical transformation has not yet fully occurred despite curriculum reform.

The most significant gap was found in assessment practices, where alignment with OBE principles is relatively weak. Most assessments still rely on written examinations, which primarily measure lower-order cognitive skills. This finding is consistent with the literature, which states that assessment literacy is a major challenge in OBE implementation (Anderson & Krathwohl, 2001). Ideally, OBE requires authentic assessments such as portfolios, performance tasks, and rubric-based evaluation. The limited use of these methods indicates that lecturers' assessment practices have not fully shifted toward competency-based evaluation, creating a disconnect between learning outcomes and evaluation strategies.

Overall, this study contributes both theoretically and practically. Theoretically, it reinforces constructive alignment theory by demonstrating that partial alignment at the document level does not guarantee effective implementation in practice. In practice, it highlights the need to strengthen lecturers' understanding of OBE, particularly in assessment literacy and active learning design. The findings also provide empirical evidence for curriculum developers and quality assurance institutions to improve training and mentoring systems. Thus, this research contributes to improving the implementation quality of OBE-based curriculum in higher education institutions, especially in developing countries' contexts.

CONCLUSION

Based on the analysis of curriculum alignment with Outcome-Based Education (OBE) principles at UNISNU Jepara, the study reveals that while curriculum development processes generally follow OBE and national higher education standards, several critical gaps remain in the alignment of CPL, CPMK, learning activities, and assessment practices. The most important finding is that OBE implementation remains largely procedural rather than fully pedagogical, with assessment practices as the weakest component due to the dominance of written examinations over authentic assessments. The key lesson from this study is that curriculum reform alone is insufficient without strengthening lecturers' conceptual and practical understanding of OBE, particularly in assessment literacy and constructive alignment. The strength of this research lies in its comprehensive document analysis across multiple curriculum components, which provides an integrated view of alignment quality and contributes to constructive alignment

theory in a real institutional context. However, this study is limited to document analysis without in-depth classroom observation or student performance data, which may not fully capture implementation practices. Future research is recommended to incorporate mixed-method approaches, including interviews, classroom ethnography, and student outcome evaluation, to provide a more holistic understanding of OBE implementation effectiveness in higher education.

ACKNOWLEDGMENT

We sincerely thank LPPM UNISNU Jepara for their support and provision of resources throughout this research. Special appreciation is also extended to the faculty members, administrative staff, and all participants who contributed their time and assistance, enabling the successful completion of this study and supporting its overall quality and relevance.

REFERENCES

Benlaghrissi & Ouahidi, L. (2024). The Impact of Mobile-Assisted Project-Based Learning on Developing EFL Students' Speaking Skills. *Smart Learning Environments*, *11*(1). https://doi.org/10.1186/s40561-024-00303-y

Chaika, O. (2025). Educational Policy and Reforms: The Impact of Globalization. In *Educational Policy and Reforms: The Impact of Globalization*. https://doi.org/10.15587/978-617-8360-20-7

Crespí, P., García-Ramos, J. M., & Queiruga-Dios, M. (2022). Project-Based Learning (PBL) and Its Impact on the Development of Interpersonal Competences in Higher Education. *Journal of New Approaches in Educational Research*, *11*(2), 259–276. https://doi.org/10.7821/naer.2022.7.993

Ebm, C., del Pozo, C., Barbarello, A., Poli, G., & Brusa, S. (2024). Unleashing Excellence: Using a Project Management Approach to Effectively Implement a Simulation Curriculum to Improve Residents' Preparedness. *BMC Medical Education*, *24*(1). https://doi.org/10.1186/s12909-024-05166

Faizah, N. (2023). Implementation of Curriculum Management in Improving the Quality of Education at the Integrated Islamic Elementary School in South Tangerang. *Al-Ishlah: Jurnal Pendidikan*, *15*(4), 6305–6320. https://doi.org/10.35445/alishlah.v15i4.4192

García-Cabo, J., & Madera, R. (2024). Does Self-employment Pay? The Role of Unemployment and Earnings Risk. *Oxford Bulletin of Economics and Statistics*, *86*(5), 1163–1197. https://doi.org/10.1111/obes.12608

Guo, Q., Zhu, M., & Zhuang, T. (2022). Multimodal-Responsive Circularly Polarized Luminescence Security Materials. *Journal of the American Chemical Society*, *145*(7), 4246–4253. https://doi.org/10.1021/jacs.2c13108

Ha, B. T. T., Quang, L. N., Thanh, P. Q., Duc, D. M., Mirzoev, T., & Bui, T. M. A. (2021). Community Engagement in the Prevention and Control of COVID-19: Insights from Vietnam. *PLoS ONE*, *16*(9 September). https://doi.org/10.1371/journal.pone.0254432

Hill, A., Readman, K., & Strampel, K. (2021). Curriculum Frameworks. In *University Teaching in Focus: A Learning-centred Approach* (pp. 53–80). https://doi.org/10.4324/9781315786698-3

Huang, X., & Xu, J. (2025). Exploring Sustainable Pathways for Citizen Science Projects in China's Watershed Governance: The Case Study of Guiyang. *Environmental Management*, *75*(7), 1758–1774. https://doi.org/10.1007/s00267-025-02184-4

Ihsan, M. N., Ahmad, N., Hasanah, A., & Suhartini, A. (2021). Islamic Boarding School Culture Climate in Forming The Religious Attitude of Islamic Students in Modern and Agrobusiness Islamic Boarding Schools. *Nazhruna: Jurnal Pendidikan Islam*, *4*(2), 362–382. https://doi.org/10.31538/nzh.v4i2.1492

Im, D., Pyo, J., Lee, H., Jung, H., & Ock, M. (2023). Qualitative Research in Healthcare: Data Analysis. In *Journal of Preventive Medicine and Public Health* (Vol. 56, Issue 2, pp. 100–110). https://doi.org/10.3961/jpmph.22.471

Jablonska, M. (2022). Towards Conscious and Independent Action: Pyotr Lesgaft's System of Physical Education as Inspiration for Meyerhold's Biomechanics. In *The Routledge Companion to Vsevolod Meyerhold* (pp. 176–190). https://doi.org/10.4324/9781003110804-16

Kadam, D. M., & Sawant, S. Y. (2020). Modified Reciprocal Teaching: Cooperative Learning Technique for Enhancing Communication Skills of First Year Engineering Students. *Journal of Engineering Education Transformations*, *33*(Special Issue), 532–536. https://doi.org/10.16920/jeet/2020/v33i0/150111

Kahn, S. (2023). Transforming Assessment, Assessing Transformation: ePortfolio Assessment Trends. In *Trends in Assessment: Ideas, Opportunities, and Issues for Higher Education* (pp. 137–154). https://doi.org/10.4324/9781003440581-9

Karakostas, P., Sifaleras, A., & Georgiadis, M. C. (2020). Adaptive Variable Neighborhood Search Solution Methods for the Fleet Size and Mix Pollution Location-Inventory-Routing Problem. *Expert Systems with Applications*, *153*. https://doi.org/10.1016/j.eswa.2020.113444

Li, Y. (2024). The Application of Hybrid Instruction Mode in the Course of Geographic Information System Principles. In *International Archives of the Photogrammetry, Remote Sensing and Spatial Information Sciences - ISPRS Archives* (Vol. 48, Issue 5, pp. 31–37). https://doi.org/10.5194/isprs-archives-XLVIII-5-2024-31-2024

Li, Y., Han, M., Yang, Z., & Li, G. (2021). Coordinating Flexible Demand Response and Renewable Uncertainties for Scheduling of Community Integrated Energy Systems with an Electric Vehicle Charging Station: A Bi-level Approach. *IEEE Transactions on Sustainable Energy*, *12*(4), 2321–2331. https://doi.org/10.1109/TSTE.2021.3090463

Maharani & Hadiapur (2023). Evaluation of High School Library Management: Implementation of CIPPO Evaluation Model. *Record and Library Journal*, *9*(1), 118–126. https://doi.org/10.20473/rlj.V9-I1.2023.118-126

Massó B. (2021). Dialogue in Education: A Strong Commitment to Social and Educational Transformation. *International Journal of Pedagogy and Curriculum*, *28*(2), 1–12. https://doi.org/10.18848/2327-7963/CGP/V28I02/85-93

Napathorn, C. (2022). The Development of Green Skills Across Firms in the Institutional Context. *Asia-Pacific Journal of Business Administration*, *14*(4), 539–572. https://doi.org/10.1108/APJBA-10-2020-0370

Owen, H. E., & Licorish, S. A. (2020). Game-based Student Response System: The Effectiveness of Kahoot! On Junior and Senior Information Science Students' Learning. *Journal of Information Technology Education: Research*, *19*, 511–553. https://doi.org/10.28945/4608

Pinto, B., & Nascimento, M. (2024). SSENPV's Integrated Management Platform. In *Procedia Computer Science* (Vol. 237, pp. 709–716). https://doi.org/10.1016/j.procs.2024.05.157

Rhee, K. E., & Boutelle, K. N. (2021). Design of the GOT Doc Study: A Randomized Controlled Trial Comparing a Guided Self-Help Obesity Treatment Program for Childhood Obesity in the Primary Care Setting to Traditional Family-Based Behavioral Weight Loss. *Contemporary Clinical Trials Communications*, *22*. https://doi.org/10.1016/j.conctc.2021.100771

Schwartz, W. A. H., Merchant, T. S., Sturla, I., & Neubauer, L. C. (2025). Digital Inequities and Emotional Resilience: Understanding the Impact of the COVID-19 Pandemic on Preclinical Medical Students. *Frontiers in Medicine*, *12*. https://doi.org/10.3389/fmed.2025.1559536

Sharma, R., & Gupta, A. (2023). Fostering Sustainable Development in the Age of Technologies. In *Fostering Sustainable Development in the Age of Technologies*. https://doi.org/10.1108/9781837530601

Slade, C., Lawrie, G., Taptamat, N., Browne, E., Sheppard, K., & Matthews, K. E. (2022). Insights into How Academics Reframed Their Assessment during a Pandemic: Disciplinary Variation and Assessment as an Afterthought. *Assessment and Evaluation in Higher Education*, *47*(4), 588–605. https://doi.org/10.1080/02602938.2021.1933379

Tobondo, Y. A. (2023). Private Lecturer Certification: A Literature Review of Policies and Challenges for Lecturers in Difficult Economic Conditions. *Jurnal Pandelo'e*, *3*(1), 1–9.

Tröhler, D. (2021). The Transformation of Christian Missions to Educational Colonization, or Motives of Speaking and Listening in the One-Sided Euro-American-Asian Dialogue. In *Euro-Asian Encounters on 21st-Century Competency-Based Curriculum Reforms: Cultural Views on Globalization and Localization* (pp. 21–40). https://doi.org/10.1007/978-981-16-3009-5_2

Umarji, I., Yadawad, R., Patil, R., Kulkarni, V., & Kulkarni, U. P. (2022). A Framework for a Curriculum to Ensure Minimum Standard for Flexible, Experiential and Multi-Disciplinary Learning Towards Achieving NEP-2020 Goals. *Journal of Engineering Education Transformations*, *35*(Special Issue 1), 221–226. https://doi.org/10.16920/jeet/2022/v35is1/22032

Wu, W., Adylbek kyzy, G., & Liu, C. huan. (2024). The Dilemma and Breakthrough of Practical Teaching of Preschool Education Major in Chinese Colleges and Universities (Based on the Professional Accreditation Perspective). *International Journal of Chinese Education*, *13*(2). https://doi.org/10.1177/2212585X241265569