



Implementing Outcome-Based Education at Build Bright University: Aligning Learning Outcomes with the Cambodian Qualifications Framework

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To Cite this Article

Dy Avauth & Manaranjan Behera (2025). Implementing Outcome-Based Education at Build Bright University: Aligning Learning Outcomes with the Cambodian Qualifications Framework. *Indian Journal of Social Economics*, 1: 1, pp. 17-33.

Abstract: This research examines Build Bright University's (BBU) integration of Outcome-Based Education (OBE) and its alignment with the Cambodian Qualifications Framework (CQF). OBE focuses on defining clear learning outcomes to ensure graduates possess necessary competencies. The study evaluated BBU's implementation across its five faculties, assessing the establishment and mapping of Program, Course, and Lesson Learning Outcomes (PLOs, CLOs, LLOs). While BBU generally adheres to academic standards, particularly in outcome establishment, gaps emerged in CLO-LLO alignment, assessment sample availability, and resource allocation, especially in Law and Social Science, and Engineering and Architecture faculties. The study emphasizes continuous faculty training, enhanced resource provision, and better assessment documentation for improved transparency. Recommendations include strengthening learning outcome alignment, increasing resource access, and fostering faculty collaboration to meet industry requirements and global benchmarks.

Keywords: Outcome-Based Education (OBE), Program Learning Outcomes (PLOs), Course Learning Outcomes (CLOs), Cambodian Qualifications Framework (CQF)

JEL Classification: I23

1. Introduction

Outcome-Based Education (OBE) is increasingly popular in higher education globally because it effectively equips graduates with the skills industries demand.

Unlike traditional methods that prioritize content delivery, OBE focuses on clearly defined learning outcomes, aligning everything from curriculum design to teaching and assessment with these goals. By emphasizing what students should be able to do after a program, OBE boosts the quality and relevance of education, particularly in professional fields like business, IT, engineering, and law. Research supports this, with studies by Smith et al. (2023) noting that OBE leads to more practical teaching and improved student preparedness, while Johnson and Lee (2024) highlight its role in meeting accreditation standards. Furthermore, Kumar and Patel (2025) suggest OBE enhances student engagement and promotes a culture of continuous improvement in teaching and learning.

In Cambodia, Outcome-Based Education (OBE) is still in its nascent stages, facing significant challenges due to a general lack of awareness and understanding among both educators and policymakers. Despite its widespread adoption in more developed nations, Cambodia's limited familiarity with the OBE framework hinders its effective application. Research, such as that by Nget (2024), highlights that many Cambodian university faculty members struggle to translate OBE principles into their actual teaching practices. This difficulty stems from insufficient professional development and inadequate training programs, creating a disconnect between OBE's theoretical aims and its practical implementation, ultimately limiting its potential to enhance educational outcomes.

A significant hurdle for Outcome-Based Education (OBE) in Cambodia is the challenge of creating curricula that truly align with specific learning outcomes. The ingrained focus on simply delivering content often prevents a shift to outcome-based methods, as many academic programs still prioritize subject knowledge over skill development. As highlighted in a report by Chhem et al. (2023), Cambodia's higher education curriculum structures are frequently rigid, lacking the flexibility needed to integrate OBE's emphasis on competency-based learning. This rigidity ultimately leads to an overemphasis on theoretical knowledge, leaving graduates with underdeveloped practical and transferable skills essential for the job market.

For Outcome-Based Education (OBE) to truly work, effective assessment strategies are crucial to determine if students are meeting their learning goals. However, Cambodia's educational system faces considerable resource limitations, including insufficient training in modern assessment tools and restricted access to technology vital for outcome-based evaluations. Research by Vannak and Phalla (2025) indicates that Cambodian universities often lack the necessary infrastructure

for continuous assessments, and faculty members aren't equipped with the tools to properly gauge student competencies. This shortage of resources and support hinders the accurate measurement and achievement of learning outcomes, significantly impeding OBE's overall success in the country.

In response to these challenges, Build Bright University (BBU) in Cambodia has taken proactive steps to integrate Outcome-Based Education (OBE) across its programs, aligning them with the Cambodian Qualifications Framework (CQF). This alignment ensures that the university's academic offerings not only meet national educational standards but also equip students with the skills and competencies demanded by both local and international labor markets. Through a series of workshops, faculty development programs, and curriculum mapping activities, BBU aims to enhance the quality of teaching and learning, ensuring that each program and course is strategically designed to achieve clearly defined learning outcomes. By embedding OBE principles into its educational structure, BBU strives to foster a student-centered approach that prepares graduates for real-world challenges and career success.

2. Literature Review

Outcome-Based Education (OBE) is an educational model that prioritizes the achievement of specific learning outcomes rather than simply delivering content, a departure from traditional education (Spady, 1994). This framework centers on clearly defining and then assessing what students should be capable of doing upon completing a course or program. Widely adopted in higher education, especially in fields like engineering, medicine, and business, OBE ensures graduates acquire the essential skills and competencies demanded by industry (Biggs & Tang, 2011). Its core principle involves aligning every part of the educational process - from curriculum design and teaching methods to assessments - with these predefined learning outcomes.

A crucial element of Outcome-Based Education (OBE) is the precise alignment between Program Learning Outcomes (PLOs) and Course Learning Outcomes (CLOs). PLOs define the broad competencies students should achieve by the end of their degree, while CLOs detail the specific knowledge and skills acquired in individual courses (Adam, 2004). This clear mapping is vital because it ensures every course contributes to achieving one or more program-level outcomes (Wang et al., 2020). Tools like curriculum matrices and rubrics are often used to visualize this relationship, ensuring a comprehensive alignment (Al-Hattami, 2019). This

meticulous alignment prevents redundant learning or gaps in skill development, paving the way for effective, program-wide assessment strategies (Suskie, 2009).

To achieve coherence in instruction, educators map CLOs to Lesson Learning Outcomes (LLOs), which are more specific and granular learning objectives at the lesson level. This mapping enables instructors to: structure lesson plans systematically, ensure that each lesson contributes directly to CLOs and design formative and summative assessments that support higher-level program goals (Anderson & Krathwohl, 2001). Effective CLO-to-LLO mapping improves student engagement and mastery of concepts by providing a clear progression of learning (Mahajan & Singh, 2017).

To ensure students truly achieve their learning outcomes, it's crucial to align assessment and teaching strategies. Leveraging frameworks like Bloom's Taxonomy (Krathwohl, 2002), different learning levels demand tailored approaches. For instance, lectures are great for knowledge transfer, while problem-based learning hones critical thinking. Case studies bridge theory and real-world application, and group discussions build communication and teamwork skills. Assessments are similarly matched: multiple-choice tests gauge recall, assignments and reports assess application and analysis, presentations evaluate communication, and capstone projects integrate knowledge (Guskey, 2007). This thoughtful alignment between teaching and assessment creates constructive alignment (Biggs, 2003), significantly boosting students' ability to meet their learning goals.

Even though Outcome-Based Education (OBE) focuses on developing skills, textbooks and reference books remain crucial for structured learning. They lay down foundational knowledge (Schunk, 2012), facilitate self-directed study, and are essential resources for tackling problems and pursuing advanced topics (Mayer, 2011). Reference books specifically enhance textbooks by providing detailed insights into specialized subjects, assisting research, and encouraging independent learning (Bransford et al., 2000).

Thus, Outcome-Based Education (OBE) ensures that graduates acquire relevant competencies through structured learning. The systematic alignment of Program Learning Outcomes (PLOs), Course Learning Outcomes (CLOs), and Lesson Learning Outcomes (LLOs) enhances curriculum coherence, while the alignment of teaching and assessment methods promotes effective learning. Despite the shift towards competency-based education, textbooks and reference books continue to be indispensable resources for academic success.

3. Objectives

The objectives of this research are as below:

- (i) To examine the integration of Outcome-Based Education (OBE) into the academic framework of Build Bright University (BBU), particularly how it aligns with the Cambodian Qualifications Framework (CQF).
- (ii) To evaluate the effectiveness of curriculum design in terms of alignment between Program Learning Outcomes (PLOs), Course Learning Outcomes (CLOs), and Lesson Learning Outcomes (LLOs).
- (iii) To assess the level of compliance across faculties regarding academic documentation, instructional planning, credit mechanisms, study hours, and assessment standards.
- (iv) To provide recommendations for improving learning outcome integration, teaching practices, and assessment strategies within the university's OBE framework.

4. Discussion of Results

4.1. Integration of Outcome-Based Education with the Cambodian Qualifications Framework at Build Bright University

Build Bright University (BBU) is one of the largest private universities in Cambodia. It operates nine campuses across the country, including Phnom Penh Central Campus, Siem Reap Campus, Preah Sihanouk Campus, Battambang Campus, Banteay Meanchey Campus, Stung Treng Campus, Ratanakiri Campus, Takeo Campus, and Tboung Khmom Campus. BBU has earned a strong reputation for excellence in fields such as Business Management, Languages, Education, Information Technology, Civil Engineering, Economics, and Law. Graduates from the university, including those from bachelor's, master's, and doctoral programs, have successfully secured employment across various sectors.

The university has structured its programs in accordance with the Cambodian Qualifications Framework (CQF), which was introduced in 2016. The CQF serves to enhance educational quality and standards, ensuring that qualifications align with the competencies, knowledge, and skills demanded by the labor market and international benchmarks. BBU provides two primary educational pathways—academic and professional—each with distinct objectives and Program Learning

Outcomes (PLOs) covering areas such as Knowledge, Cognitive Skills, Interpersonal Skills, Responsibility, Numerical Skills, Information Technology, Communication, and Psychomotor Skills. Programs are designed with specific admission requirements and credit systems. Courses are classified into basic major subjects, core major subjects, and general education subjects. Degree completion involves meeting defined criteria for qualification awards, degree titles, and career prospects. Additionally, all programs incorporate program mapping, systematically linking each course to PLOs at different levels—partially, moderately, or fully achieved.

The university incorporates Outcome-Based Education (OBE) into its academic programs, aligning them with the Cambodian Qualifications Framework. OBE of BBU emphasizes a student-centered learning approach with clearly defined outcomes. This method includes personalized education to cater to different learning styles, an instructor's role as a facilitator who mentors rather than dictates, and continuous feedback and reflection to refine teaching strategies.

Build Bright University (BBU) has conducted a series of workshops aimed at enhancing faculty understanding and implementation of Outcome-Based Education (OBE). The first workshop, held on December 6, 2024, engaged 10 lecturers from the Faculty of Engineering and Architecture. This session introduced OBE and focused on aligning Program Learning Outcomes (PLOs) with Course Learning Outcomes (CLOs), using Bloom's Taxonomy to clarify cognitive levels. The second workshop, on December 20, 2024, involved 13 lecturers from diverse faculties such as Business Administration and Tourism, addressing the integration of OBE principles across disciplines. It ensured that CLOs reflected both industry demands and real-world applications. Following this, the third workshop, in January 2025, involved 26 lecturers from campuses in Thbaungkmum, Ratanakiri, and Steungtreng. It delved deeper into applying Bloom's Taxonomy across educational levels, helping lecturers create measurable outcomes that align with program goals.

The subsequent workshops continued to build on these foundations. Workshop 4, held on January 10, 2025, with 38 lecturers from the Faculty of Business Administration, focused on mapping PLOs to CLOs in business-related programs, emphasizing both theoretical knowledge and practical skills. Workshop 5, held in January 2025 with 14 lecturers from the Faculty of Science and Technology, focused on designing PLOs and CLOs for technical courses that align with the evolving needs of the science and technology industries. Workshop 6, on January 15, 2025, with 51 lecturers from the Takeo and Preah Sihanouk campuses, addressed

aligning PLOs and CLOs with special attention to regional needs and educational diversity. Workshop 7, on January 21, 2025, involved 82 lecturers from Siem Reap, Battambang, and Banteay Meanchey campuses, and focused on implementing OBE in large, diverse campuses while using Bloom's Taxonomy to map PLOs and CLOs. The eighth workshop, in February 2025, with 15 lecturers from the Faculty of Arts, Language, and Humanity, taught the integration of academic and soft skills into PLOs and CLOs, with an emphasis on measurable action verbs. Finally, Workshop 9, on February 14, 2025, engaged 35 lecturers from the Faculty of Law and Social Science. This session focused on aligning PLOs, CLOs, and Lesson Learning Outcomes (LLOs) in legal and social science programs, emphasizing critical thinking, ethical reasoning, and practical application. Altogether, these workshops involved 274 lecturers across various faculties and campuses, equipping them with the necessary knowledge to effectively implement OBE in their teaching practices.

In Outcome-Based Education (OBE), the use of action verbs from Bloom's Taxonomy is essential for defining measurable learning outcomes. These verbs, such as "define," "analyze," "apply," and "evaluate," are crucial in Program Learning Outcomes (PLOs), Course Learning Outcomes (CLOs), and Lesson Learning Outcomes (LLOs) as they help clarify the cognitive levels at which students are expected to perform. This offers a clear framework for both teaching and assessment. Bloom's Taxonomy categorizes learning into six stages—Remember, Understand, Apply, Analyze, Evaluate, and Create—with each stage requiring specific verbs that correspond to different cognitive processes.

For instance, verbs like "understand" in PLOs outline the broad knowledge that students are expected to acquire throughout a program, while verbs like "apply" and "analyze" are more specific to CLOs and LLOs, focusing on the skills and competencies students should develop in particular courses or lessons. The workshops on OBE at Build Bright University were designed to equip faculty with the tools necessary to effectively design, implement, and assess these learning outcomes. By strategically using Bloom's Taxonomy verbs to align PLOs, CLOs, and LLOs, the university ensures that its programs provide a comprehensive, outcome-driven education that addresses both student needs and industry demands.

The precise application of these action verbs fosters a measurable and impactful learning experience, ultimately enhancing student success. Through this approach, the university creates a structured, clear pathway for students to achieve their learning objectives and prepares them for real-world challenges.

4.2. Evaluation of Academic Documentation and Instructional Planning Across Faculties

The analysis of academic documentation and instructional planning across five faculties at Build Bright University reveals a high level of adherence to curriculum and instructional design standards, with notable differences across the faculties. The Faculty of Arts, Humanities, and Languages demonstrates exceptional performance, achieving perfect scores (100 percent) in all seven key indicators, including course descriptions, Course Learning Outcomes (CLOs), lesson plans, teaching methodologies, Lesson Learning Outcomes (LLOs), textbooks, and reference books. This indicates a well-structured academic framework, where all essential components of the curriculum and instructional design are in place and meet the university's high standards.

The Faculty of Science and Technology, while also performing well, shows slight room for improvement. It achieved 100 percent compliance in course descriptions and CLOs, indicating a solid foundation in these areas. However, it scored 93 percent in lesson plans, teaching methodologies, and resource availability, suggesting that while the curriculum components are largely implemented, there are some minor gaps in instructional planning and resource provision. This faculty may benefit from further enhancement in these areas to ensure a more cohesive and comprehensive academic delivery.

On the other hand, the Faculty of Business Administration, while performing excellently in most categories with scores of 100 percent, displayed a slight dip in the availability of textbooks and reference books, scoring 88 percent and 81 percent, respectively. These scores highlight the need for improvement in learning resources to ensure that students have access to up-to-date and relevant materials. Similarly, the Faculty of Engineering and Architecture faced more significant challenges, particularly in textbooks (60 percent) and reference books (76 percent). These deficiencies are particularly concerning in a technical field, where up-to-date reference materials are crucial. The Faculty of Law and Social Science showed the lowest scores overall, particularly in lesson plans, teaching methodologies, and resources, scoring just 78 percent. This suggests a need for further support in curriculum planning, pedagogy, and material provision to ensure that students in this faculty receive a comprehensive education that aligns with industry standards (Table 1).

This analysis illustrates that while most faculties at Build Bright University maintain strong academic frameworks, there are common challenges related to the availability of textbooks and reference books. These gaps, particularly in the technical and law faculties, should be addressed to further elevate the quality of education and provide students with the necessary resources for academic success.

Table 1: Course Components and Resource Availability Across Faculties

<i>Faculty</i>	<i>Course code number</i>	<i>Courses have description and course learning outcomes</i>	<i>Lesson Plan</i>	<i>Courses have teaching methodologies</i>	<i>Courses have lesson learning outcomes</i>	<i>Textbooks</i>	<i>Reference books</i>
Faculty of Arts, Humanities, and Languages	100%	100%	100%	100%	100%	100%	100%
Faculty of Science and Technology	100%	93%	93%	93%	93%	93%	93%
Faculty of Business Administration	100%	100%	100%	100%	100%	88%	81%
Faculty of Engineering and Architecture	100%	93%	93%	93%	93%	60%	76%
Faculty of Law and Social Sciences	100%	78%	78%	78%	78%	78%	78%
Average	100%	93%	93%	93%	93%	84%	86%
All Total	92%						

Source: Own Survey.

4.3. Compliance with Credit Mechanisms and Study Hours Across Faculties

The analysis of credit mechanisms and study hours across the five faculties at Build Bright University reveals strong alignment with academic standards. All faculties have achieved perfect compliance (100 percent) in critical areas, including the Credit Mechanism and Principle on Credit Transfer. The uniformity in credit allocation across faculties ensures fairness and comparability in student learning, while the well-established credit transfer framework offers students academic flexibility, allowing for recognition of their learning achievements across different programs and institutions. These mechanisms are fundamental in supporting student mobility and ensuring that the academic experience is consistent and transferable.

Furthermore, all faculties have effectively implemented the required Theoretical Study Hours and Practical Study Hours. This ensures that students receive the necessary foundational knowledge through theory-based learning and have ample opportunities to engage in hands-on experiences that are essential to their overall academic development. The consistency in the allocation of practical study hours reflects the university's commitment to providing students with a balanced education that integrates theoretical knowledge with practical skills, preparing them for real-world challenges.

The Practical Application Hours, which may include internships, labs, or real-world projects, are also emphasized across all faculties. This focus aligns with a competency-based education approach, ensuring that students gain experience that is directly applicable to their future careers. The university's 100 percent compliance across all faculties in these areas demonstrates its commitment to maintaining high academic standards, ensuring that students receive a well-rounded education that equips them for both academic and professional success. The total compliance rate of 100 percent reflects the university's consistent approach to curriculum design and the effective execution of its academic policies (Table 2).

Table 2: Overview of Credit Mechanism, Credit Transfer Principles, and Study Hours Across Faculties

<i>Faculty</i>	<i>Credit mechanism</i>	<i>Principle on credit transfer</i>	<i>Theoretical study hours</i>	<i>Practical study hours</i>	<i>Practical application hours</i>
Faculty of Arts, Humanities, and Languages	100%	100%	100%	100%	100%
Faculty of Science and Technology	100%	100%	100%	100%	100%
Faculty of Business Administration	100%	100%	100%	100%	100%
Faculty of Engineering and Architecture	100%	100%	100%	100%	100%
Faculty of Law and Social Science	100%	100%	100%	100%	100%
Average	100%	100%	100%	100%	100%
All Total	100%				

Source: Own Survey.

4.4. Curriculum Structure and Learning Outcome Integration Across Faculties

The analysis of curriculum structure and learning outcome integration across the five faculties at Build Bright University demonstrates varying levels of compliance with key academic standards. The evaluation covers several important areas, including the establishment of learning outcomes at the program, course, and lesson levels, as well as the mapping of Program Learning Outcomes (PLOs) to Course Learning Outcomes (CLOs) and CLOs to Lesson Learning Outcomes (LLOs). The Faculty of Arts, Humanities, and Languages excels in all these areas, achieving a perfect score of 100 percent in each indicator. This shows a high level of alignment and integration of learning outcomes at every level, indicating a robust and cohesive curriculum structure.

The Faculty of Science and Technology performs strongly as well, achieving 100 percent compliance in program-level outcomes and course-level mapping. However, there is a slight gap in the mapping between CLOs and LLOs, with a score of 93 percent. This suggests that while the overall structure of learning outcomes is well-defined, there is room for minor improvements in aligning the course-level outcomes with the lesson-level outcomes. Similarly, the Faculty of Engineering and Architecture mirrors the performance of the Faculty of Science and Technology, with full compliance in program outcomes and course mapping but scoring 93 percent in CLO to LLO mapping. Both faculties, while excelling overall, show a need for minor adjustments in fine-tuning the linkage between course and lesson-level outcomes.

In contrast, the Faculty of Law and Social Science records the lowest scores, with only 78 percent compliance in mapping CLOs to LLOs and other categories. This indicates significant issues with course planning, pedagogy, and the alignment of learning outcomes. Despite this, the faculty maintains 100 percent compliance in tracking the total number of courses. On average, faculties scored 93 percent in mapping PLOs to CLOs and CLOs to LLOs, and 100 percent in tracking courses and their domains. Overall, the compliance rate across all faculties stands at 96 percent, showing strong integration of learning outcomes. However, there is room for improvement in some faculties, particularly the Faculty of Law and Social Science, where further institutional support is needed to improve alignment and consistency (Table 3).

Table 3: Mapping of Learning Outcomes and Course Structure Across Faculties

<i>Faculty</i>	<i>Each Program has learning outcomes</i>	<i>Each course has course learning outcomes</i>	<i>Each course has lesson learning outcomes</i>	<i>Mapping between PLOs & CLOs</i>	<i>Mapping between CLOs & LLOs</i>	<i>Total number of courses</i>	<i>Number of courses by domains</i>
Faculty of Arts, Humanities, and Languages	100%	100%	100%	100%	100%	100%	100%
Faculty of Science and Technology	100%	93%	93%	93%	93%	100%	100%
Faculty of Business Administration	100%	100%	100%	100%	100%	100%	100%
Faculty of Engineering and Architecture	100%	93%	93%	93%	93%	100%	100%
Faculty of Law and Social Science	100%	78%	78%	78%	78%	100%	100%
Average	100%	93%	93%	93%	93%	100%	100%
All Total	96%						

Source: Own Survey.

4.5. Assessment Standards and Compliance Across Faculties

The analysis of Build Bright University's (BBU) adherence to academic standards for assessment preparation and student performance alignment highlights varying levels of compliance across the faculties. The Faculty of Arts, Humanities, and Languages achieved perfect compliance (100 percent) across all seven indicators, except for the availability of assessment result samples, which was recorded as 0 percent. This absence of assessment evidence limits transparency in the faculty's assessment framework, despite its robust structure in other areas. The high compliance in other categories suggests that the faculty has a well-developed assessment system, but the lack of result samples needs to be addressed to ensure complete accountability.

In contrast, the Faculty of Science and Technology recorded 87 percent compliance across most indicators. While the faculty has a solid foundation in assessment preparation, alignment, and methods, the absence of assessment result samples significantly impacted its overall performance. This gap is critical,

as it reduces transparency and hinders the ability to measure the effectiveness of the assessment methods used. Similarly, the Faculty of Business Administration performed well, achieving 100 percent compliance in all areas except for the availability of assessment result samples, which also stands at 0 percent. While the assessment approach is well-organized and varied, the absence of result samples remains a limitation, signaling that further improvements are needed in documentation practices.

The Faculty of Engineering and Architecture scored 93 percent across most indicators, with the lack of assessment result samples leading to slightly lower compliance compared to other faculties. The Faculty of Law and Social Science recorded the weakest scores, with only 78 percent compliance across all indicators. The absence of assessment result samples, along with lower scores in other areas, suggests significant challenges in the faculty's assessment framework. The overall average institutional compliance stands at 92 percent across all key assessment indicators, with the major gap being the lack of assessment result samples, which severely impacted the total compliance score, resulting in a final compliance rate of 79 percent. This analysis indicates that while the university maintains a generally strong academic framework, addressing the lack of assessment result samples across faculties is crucial for ensuring transparency and improving the quality of assessment practices (Table 4).

Table 4: Assessment Preparation, Methods, and Alignment with Expected Learning Outcomes Across Faculties at Build Bright University

<i>Faculty</i>	<i>Each course has an assessment preparation</i>	<i>Results from student assessments comparing expected learning outcomes with their actual results</i>	<i>Assessment methods types</i>	<i>Credibility level of assessment methods</i>	<i>Sample of assessment results</i>	<i>Each course has more assessment methods</i>	<i>Table of mapping between assessment methods and expected learning outcomes</i>
Faculty of Arts, Humanities, and Languages	100%	100%	100%	100%	0%	100%	100%
Faculty of Science and Technology	87%	87%	87%	87%	0%	87%	87%

<i>Faculty</i>	<i>Each course has an assessment preparation</i>	<i>Results from student assessments comparing expected learning outcomes with their actual results</i>	<i>Assessment methods types</i>	<i>Credibility level of assessment methods</i>	<i>Sample of assessment results</i>	<i>Each course has more assessment methods</i>	<i>Table of mapping between assessment methods and expected learning outcomes</i>
Faculty of Business Administration	100%	100%	100%	100%	0%	100%	100%
Faculty of Engineering and Architecture	93%	93%	93%	93%	0%	93%	93%
Faculty of Law and Social Science	78%	78%	78%	78%	0%	78%	78%
Average	92%	92%	92%	92%	0%	92%	92%
All Total	79%						

Source: Own Survey.

5. Conclusion and Recommendations

The integration of Outcome-Based Education (OBE) at Build Bright University (BBU) has demonstrated strong alignment with academic standards, as evidenced by the comprehensive efforts in mapping Program Learning Outcomes (PLOs), Course Learning Outcomes (CLOs), and Lesson Learning Outcomes (LLOs). The university's commitment to incorporating OBE into its curriculum reflects a student-centered learning approach, which aims to enhance the quality and relevance of education across various disciplines. Despite significant progress in aligning curriculum components and assessments, certain gaps in faculty compliance were identified, particularly in the availability of assessment result samples and the alignment of CLOs with LLOs.

BBU's faculties, especially those in the fields of Arts, Humanities, and Languages, have largely excelled in implementing OBE, achieving full compliance in most areas. However, faculties such as Law and Social Science, and to some extent Engineering and Architecture, showed areas needing attention. These include improving the

availability of textbooks, enhancing resource allocation, and addressing gaps in mapping CLOs to LLOs. Additionally, the lack of assessment result samples across all faculties represents a critical gap, undermining transparency and accountability in the assessment process. Faculty members must prioritize improving documentation and the collection of assessment samples to ensure that the effectiveness of teaching and learning is measurable.

To enhance the effectiveness of Outcome-Based Education (OBE) at Build Bright University, the following recommendations are provided:

1. **Enhance Faculty Training:** Provide ongoing professional development and training workshops specifically focused on OBE implementation. These initiatives should particularly target faculty members in departments that currently show lower compliance scores, ensuring a comprehensive understanding and consistent application of OBE principles across all academic programs.
2. **Improve Resource Allocation:** Address existing shortages in essential textbooks and reference materials, especially within the Faculties of Engineering, Architecture, and Law. Ensuring students and faculty have access to current and relevant resources is crucial for successful OBE implementation and for fostering a deeper understanding of course content.
3. **Ensure Comprehensive Assessment Documentation:** All faculties should prioritize including samples of assessment results in their documentation. This practice will significantly increase transparency, support the evaluation of teaching methodologies, and provide clearer insights into actual student learning outcomes.
4. **Strengthen CLO to LLO Mapping:** Faculties identified with gaps in aligning Course Learning Outcomes (CLOs) to Lesson Learning Outcomes (LLOs) must refine their mapping processes. This refinement will ensure that every lesson meaningfully contributes to broader course objectives, fostering deeper student engagement and facilitating the achievement of desired learning outcomes.
5. **Increase Collaboration Across Faculties:** Encourage and facilitate interdisciplinary workshops and discussions to promote the sharing of best practices in OBE implementation. This collaborative approach will enable faculties to learn from each other's successes and challenges, strengthening OBE across the university.

To conclude, while BBU's implementation of OBE has made significant strides, addressing the identified gaps will enhance the overall quality of education, ensuring that graduates are well-prepared to meet the demands of the industry and contribute effectively to society. The university's continued efforts to refine and improve its academic practices will lead to more comprehensive and measurable learning outcomes across all faculties.

References

- Adam, S. (2004). Using learning outcomes: A consideration of the nature, role, and implications of learning outcomes in the European educational context. *Bologna Process Seminar*.
- Al-Hattami, A. (2019). Development of a curriculum mapping framework for higher education. *International Journal of Educational Research*, 94, 45-58. <https://doi.org/10.1016/j.ijer.2019.01.002>
- Anderson, L. W., & Krathwohl, D. R. (2001). *A taxonomy for learning, teaching, and assessing*. Longman.
- Biggs, J., & Tang, C. (2011). Constructive alignment in university teaching. *Springer*. <https://doi.org/10.1007/978-1-4419-1468-8>
- Bransford, J. D., Brown, A. L., & Cocking, R. R. (2000). How people learn: Brain, mind, experience, and school. *National Academies Press*. <https://doi.org/10.17226/9853>
- Chhem, R., Vannak, P., & Khieu, K. (2023). Curriculum reforms in Cambodian higher education: Addressing the gap for Outcome-Based Education. *Journal of Southeast Asian Education*, 40(1), 115-128.
- Dy, D., & Behera, M. (2025). Advancing Education and Development: A Multi-Dimensional Analysis of Programs and Projects at Build Bright University, Cambodia
- Guskey, T. R. (2007). Professional learning and student learning outcomes. *Educational Leadership*, 64(6), 56-60.
- Johnson, R., & Lee, K. (2024). Aligning educational outcomes with industry standards: The role of OBE in curriculum development. *International Journal of Education and Training*, 38(1), 102-115.
- Kumar, S., & Patel, R. (2025). Student engagement and learning outcomes in outcome-based education. *Journal of Educational Innovation*, 12(4), 89-101.
- Mahajan, R., & Singh, T. (2017). Alignment of learning outcomes with assessment: A case study. *Journal of Educational Research*.
- Nget, T. (2024). Overcoming barriers to implementing Outcome-Based Education in Cambodian universities. *Journal of Educational Development*, 32(3), 145-157.

- Schunk, D. H. (2012). *Learning theories: An educational perspective*. Pearson.
- Smith, J., Brown, T., & Taylor, M. (2023). The impact of Outcome-Based Education on student outcomes: A global perspective. *Journal of Higher Education Policy*, 45(2), 234-248.
- Suskie, L. (2009). *Assessing student learning: A common-sense guide*. Jossey-Bass.
- Vannak, C., & Phalla, S. (2025). Challenges in assessment practices for Outcome-Based Education in Cambodia: A closer look at resource limitations. *Asian Education Journal*, 16(2), 202-215.
- Wang, X., Su, Y., Cheung, S., Wong, E., & Kwong, T. (2020). Developing an outcome-based curriculum framework. *Higher Education Research & Development*, 39(3), 535-548. <https://doi.org/10.1080/07294360.2019.1706506>