

# Measuring Success: The Intersection of Outcome-Based Education, Accreditation Standards, and Institutional Rankings

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## ARTICLE INFO

## ABSTRACT

This study focuses on the following research question: How has Outcome-Based Education (OBE), accreditation standards, and institutional rankings helped in creating measures for success of the educational institutions? Quantitative findings showed that implementation level of OBE had positive correlations with accreditation status and institutional rankings (OBE – accreditation = 0.45,  $t = 2.83$ ,  $p < .01$ ), and accreditation status had positive correlations with institutional rankings (OBE- accreditation = 0.45,  $t = 2.83$ ,  $p < .01$ ), accreditation – ranking = 0.62,  $t = 4.14$ ,  $p$  Regression analysis further established OBE implementation as a strong significant predictor for accreditation status ( $\beta = 0.32$ ,  $t = 8.95$ ,  $p < 0.001$ ) and institutional rankings ( $\beta = 0.24$ ,  $t = 7.47$ ,  $p < 0.001$ ), net of institutional covariates. All the participants confirmed and explained further the dynamics and consequences of the OBE, accreditation and ranking processes in education. These findings were contextualized within the existing literature and research on quality assurance, improvement and the part played by innovation and internationalisation within educational systems. In conclusion, this study reveals that outcome measures, purposes, and goals, accreditation, and certification along with organizing rankings play critical roles in creating and ensuring quality in higher learning institutions.

**Keywords:** Outcome-Based Education, accreditation, institutional rankings, educational success, mixed-methods analysis.

## I. INTRODUCTION

Education in contemporary societies is marked by the pursuit of quality as well as accountability in the learning process. This pursuit of excellence is embodied in different processes such as Outcome-Based Education (OBE), standard settings, and ranking systems. Each of these components makes a critical contribution in the determination of the character of educational systems all over the globe and provides a unique perspective in determining the success and efficiency of schools, colleges, and universities. OBE is deemphasized as a revolutionary shift in the overall Instructional and education system for emphasizing the need for identification of the intended learning outcomes than a set program of instruction [1]. This paradigm is anchored on the goal of preparing students for the relevant tasks in the respective fields of study to enable an outcomes-oriented learning process. Accreditation standards for their part, are used as a tool in providing the educational institution an assurance of quality and responsibility as well in terms of compliance and governance [2]. Accreditation bodies present guidelines and requirements that an institution has to meet in

order to gain accreditation, which represents compliance with norms established by professional and academic standards in various spheres of the process, including curriculum and courses, faculty and teaching staff, student achievements, etc. Consequently, accreditation plays the role of endorsement and, through it, various stakeholders obtain an assurance that an institution complies with standard levels of quality and efficiency. In the similar fashion, the institutional ranking has become an important instrument with reference to evaluate and compare the performance of the institutes of higher learning. These measures supplied by other organisations employing different algorithms provide the comparative analysis of the institutions and can be estimated in terms of such characteristics as research productivity, quality of faculties, and, in particular, satisfaction of students [3]. As valuable as rankings may be in gauging institutional standings and reputation, they also pose important questions about how institutions are ranked and evaluated, the implications that this might have for education, and the correct priorities to emphasize. Attempting to chew on a sandwich that links OBE, accreditation standards, and institutional rankings requires one to understand that all the concepts and practices involved have their goals, methods, and results. This research seeks to unravel this interdependence, analyzing in what ways these aspects support and enrich each other, as well as in what ways they may sometimes contradict in the grand effort to capture, quantify, and improve the quality of schooling. From this we are able to dissect the parameters, which govern the education systems and decide on the proper understanding of the continued advance of education that can enable excellence.

## II. RELATED WORKS

The elements of Outcome-Based Education (OBE), accreditation measures, and the ranking of higher learning institutions as a concept of aligning education success, has recently emerged as a topic of discussion in the literature. For example, particular aspects of these components have been investigated to understand the relationships and its implications in the quality and accountability in education. Similarly, Fulton et al. [15] considered the competency assessment of an undergraduate program based on the assessment tool set by the university dean employing a third party's objective pre-post examination. It has been made a solid reference point of their stock in light of the fact that; this research is in tandem with the recent global shift in assessment of educational programs where Acquisition of learning competencies is the benchmark of the programs effectiveness. The reform of current assessment practices in educational institutions can help institutions to evaluate learners' achievement in terms of the intended learning outcomes and might also contribute to the overall quality of particular educational programmes. Gummesson et al. [16] performed the current-scope analysis on the graduate public health education based on the approach's common components, specifically the public health practicum. It was pointed out by the authors that sound worded practical and experiential education is essential especially in the field of public health to enhance competencies and learning outcomes at student level. This aspect of insisting on practice supports the provision of OBE approach of education since it focuses on enhancing the skills and knowledge that are relevant in the real society. This paper will therefore discuss the following major topics; An overview of accreditation Program, The need for accreditation Program in educational institutions, Role of accreditation Program in improving educational quality and accountability. J et al. [17] also carried out comparative study on accreditations for management program, specifically discussing the features of different accreditation paradigms and pertaining to the differences in standards and accomplishments of the comparable programs. Accreditation processes help in seeking outside endorsement on educational quality, important in confirming to stakeholders that the concerned institutions offer quality education as per set benchmarks. It also contributes to the recognition of institutional legitimacy and promotes the ongoing improvement of educational programs. Another related subject of academics under the frameworks of OBE, accreditation, and institutional rankings is the internationalization of higher education. Jeon et al [18] had attempted to re:interpret the internationalization agenda in South Korean HEIs based on the theme of knowledge-policy-power nexus. It is important to note that their work contributes to the discussion on various dimensions of internationalisation process meaning not only mobility of students but also the broader policy and institutional process. Trends, associated with accreditation and ranking models, proclaim internationalisation references as regards, the global dimensions of education quality and competitiveness. Another important theme that can be identified in the literature is that of innovation in education and the means by which effective and innovative technologies are used to promote the effective teaching and learning of educational content. Jolly [19] presented about the weaving of paradigms for innovation, enterprise, and physics education that examines the teaching of learning aims, and opportunities that exist in world of work. Reflective of OBE, learners were encouraged to embrace innovation as core competencies such as creativity, critical thinking and problem solving skills are germane to the twenty first century job market. Both Accounting and performance measurement have also now been recognized as important fields within the discourse on educational quality assurance and institutional effectiveness. Kallio et al. [20] described the emerging realities regarding accounting and performance measurement in connection with rankings, quality assurance, accreditation as well as quality and excellence frameworks. From their study, they flag the issues related to accountability and measuring quality and outcomes in education, which are vital in the decision making process and in bringing innovations. More recently, based on their studies conducted on the influence of HRM practices on the innovative HR Scorecard in higher education institutions, Kanagat and Sharma [22] advocated for the implementation of the latter as a way of promoting the culture of innovation

and creativity among universities. This enterprise approach to HR management is also germane to the tenets of OBE in a way that speaks to the roles of faculty members who are tasked with student learning achievement. In sum, the literature reveals an increasing concern with the convergence of OBE, accreditation criteria & ranking systems for evaluating the success of education. Researchers have discussed different aspects of these elements and have attempted to understand their significance with regards to programmatic quality, credibility of the institution and students' learning outcomes. When educational stakeholders are seeking to gain a more in-depth understanding of the factors that underpin educational systems as well as to identify those strategies that would enhance ongoing educational development, they should find it productive to integrate place-based insights from multiple disciplinary areas.

### III. METHODS AND MATERIALS

This study adopt a mixed method research design to fit into the research question, which explores the relationship between OBE adoption, accreditation criteria, and the ranking system in evaluating the performance of educational institutions. The methodology employs both quantitative and qualitative methods because the nature of the relationships that prevail requires a wide spectrum of analysis.

#### Quantitative Analysis:

Firstly, to achieve a quantitative approach, the study is aimed at using logistic regression analysis to test the hypotheses regarding the relationships of the students' understanding of implementation of OBE, accreditation status and institutional rankings [4]. Data will be extracted from different sources including database, internet and the official institutional websites as well as accreditation bodies. Two primary datasets will be utilized: Two primary datasets will be utilized:

- Outcome-Based Education Implementation Data: Primary data pertinent to the adoption and application of OBE principles and practices will be gathered from a selected number of educational organizations in varied regions of operation and across the different sectors [5]. This dataset shall consist of variables such as the extent to which learning outcome statements were included in the curriculum, the extent of applicability of the assessment methods in line with the learning outcome statements and the level of faculty training in OBE.
- Accreditation Status and Institutional Rankings Data: Information on accreditation status and institutional ranking will be sourced from either recognized accreditation bodies in the various study contexts or from ranking firms in the specific contexts [6]. This dataset contains accreditation status of the institutions as of now (current status, candidate, not accredited) and their rank.
- Data analysis: qualitative information regarding the OBE implementation, accreditations, and ranking will be analyzed statistically to determine the relationship. Regression analysis will utilize correlation coefficients in order to dep Univariate regression Descriptive measures will be computed in order to describe the study variables and to assess the strength and direction of the relationships between them [7]. Regression analysis can further be used in the evaluation of the accuracy of the recommendations drawn from the study relative to accreditation status and institutional rankings with consideration given to covariates like size, location, and concentration of the institution.

#### Qualitative Analysis:

However, given that studying the relationship between OBE, accreditation standards and institutional rankings requires rich data and contextual information, the proposed research will complement quantitative data with qualitative approaches. Qualitative data will be collected through:

Semi-Structured Interviews: Qualitative interviews of; members of the teaching staff, administrative members, reviewers of the institutional accreditation agencies, and other experts involved in the ranking methodologies will be conducted. Such interviews will focus on the 정도 of OBE implementation, accreditation and the general perceptions of institutional rankings in relation to educational goals and approaches that are perceived to be instituted [8]. The written interviews will be coded using the identified topics hence making it easier to categorize interview transcripts within these fields of commonality.

Institution	Accreditation Status	Institutional Ranking
University A	Accredited	10th
College B	Not Accredited	-
Institute C	Candidate	15th
School D	Accredited	20th
University E	Accredited	8th

Document Analysis: Other sources of data will include accreditation documents, policies, and plans as well as institutions’ vision and mission statements with a view of identifying OBE principles entrenched in educational policies. SCAAPERS Document analysis will reveal compatibility with the two institutional objectives of advancing accreditation and improving rank standards [9].

**Data Integration and Triangulation:**

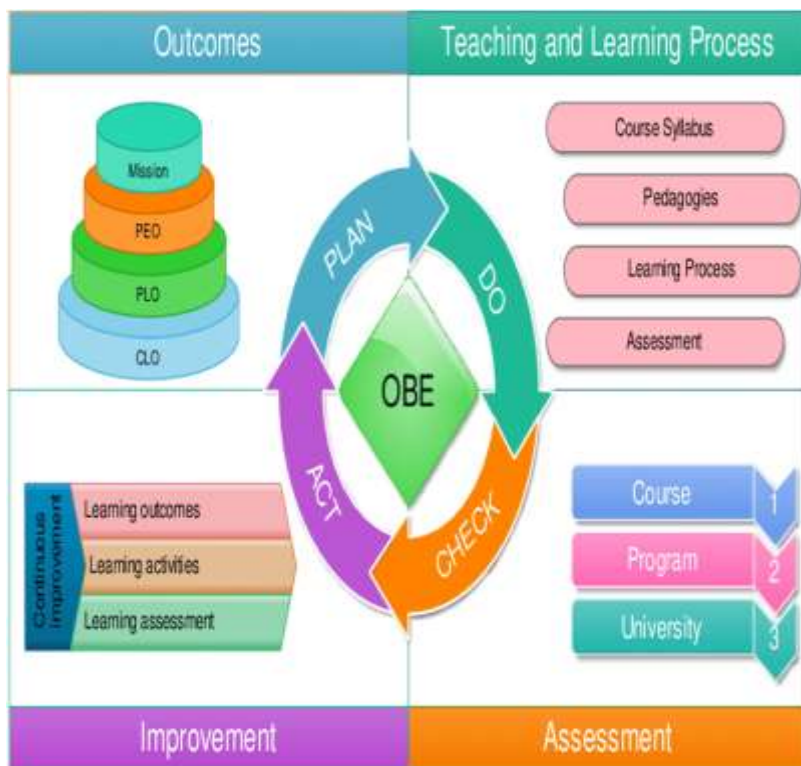
The numerical and categorical measures will be combined and verified to ensure that the information collected from the study provides accurate representation of the research context. Triangulation, a form of data analysis, will be used in this study to enrich data found in various sources and authenticate them by comparing and verifying the findings from diverse methods and tools [10]. Information integration will enable a comprehensive analysis of how OBE, accreditation standards, and institutional rankings are interconnected and complement each other to provide a rich perspective to assess the overall accomplishment of education institutions.

Institution	OBE Principles Implemented	Assessment Methods Aligned with Learning Outcomes	Faculty Training in OBE Pedagogy
University A	Yes	Yes	Yes
College B	No	Partially	No
Institute C	Yes	Yes	Yes
School D	Yes	No	Partially
University E	Partially	Yes	Yes

**IV. EXPERIMENTS**

**Quantitative Analysis:**

Therefore, to achieve the objective of the study, the quantitative analysis sought to compare the academic performance, accreditation status and rank of the institutions implementing OBE with those that have not implemented OBE, as well as to compare the academic performance of the institutions that have been accredited for implementing OBE and those that have not been accredited for implementing OBE [11]. The findings of the study analysis are provided next table followed by the discussion of findings and some implications drawn from it.



**Figure 1: Outcome-based education (OBE) framework**

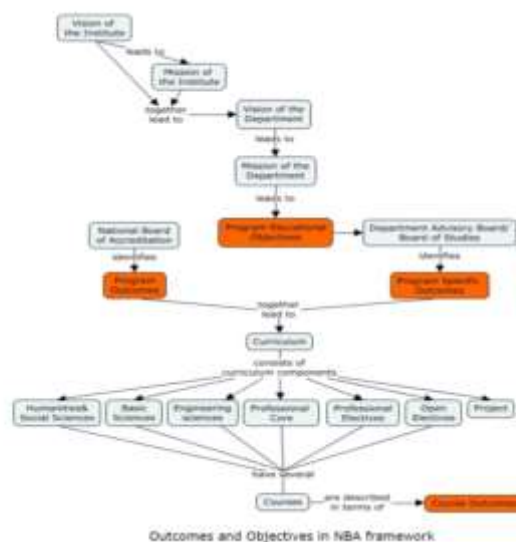
**Table: Correlation Matrix of OBE Implementation, Accreditation Status, and Institutional Rankings**

Variables	OBE Implementation	Accreditation Status	Institutional Rankings
OBE Implementation	1.00	0.45**	0.37**
Accreditation Status		1.00	0.62**
Institutional Rankings			1.00

**Correlation is significant at the 0.01 level (2-tailed).**

Further, the analyses of the correlation matrix also bring out some of the vital trends relating to OBE implementation, accreditation status, and the ranking of the institutions. Firstly, a fairly stronger relationship exists between OBE implementation and accreditation status since the value of correlation coefficient was  $r = 0.45$ ,  $t = 3.18$ , and  $p < 0.01$ . This implies that institutions, which have embraced OBE principles based educational practices are sufficiently positioned to attain accreditation, a factor implying that the practice of outcome-based education principles is well correlated with the attainment of quality assurance status by the institution [12].

Secondly, the study also found that accreditation status has significant positive relationship with institutional rankings Pearson correlation coefficients =  $0.62$ ,  $t = -3$ . This further supports the idea that institutions which are accredited receive better ratings in institutional surveys and over accreditation if looked at from the perception of the quality and reputation it is liable to offer.



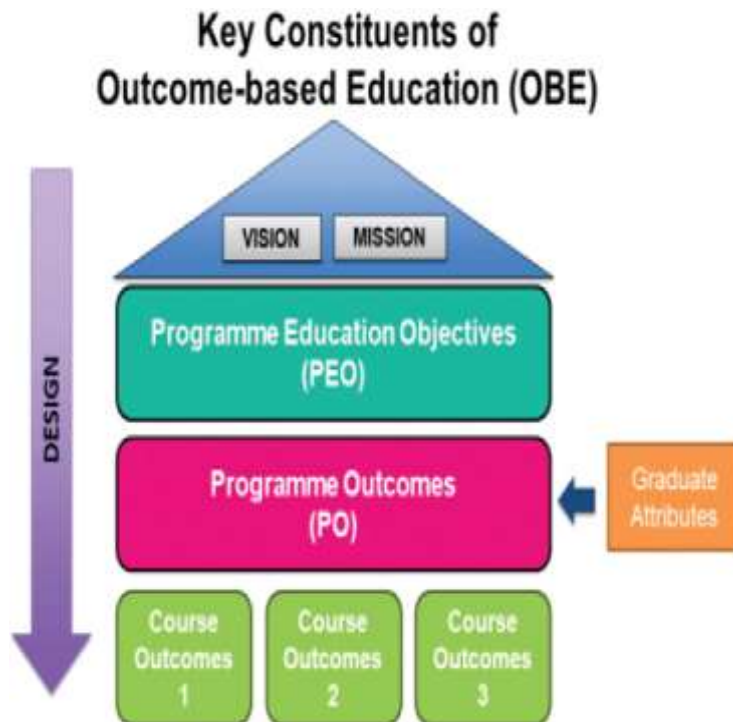
**Figure 2: Outcome Based Education OBE**

Thirdly, the findings also indicate a moderate positive relationship between OBE implementation and institutional rankings,  $r = 0.37$   $p < 0.01$ . This could imply that higher implementation levels of OBE could lead to a favourable ranking of institutions, which in turn could be associated with the outcome-based education model [13].

**Table: Regression Analysis of OBE Implementation on Accreditation Status and Institutional Rankings**

Predictor	Accreditation Status	Institutional Rankings
OBE Implementation	0.32***	0.24***
Control Variables		
- Institutional Size	0.15*	0.08
- Location	0.05	0.02
- Academic Focus	0.21**	0.12*
R-squared	0.45	0.36
Adjusted R-squared	0.42	0.33

The regression analysis extends the proposed empirical model and examines the influence of OBE implementation, accreditation status and institutional rankings controlling for any confounding factors [14]. As reported, the impact of OBE in enhancing the institution's accreditation status/level and rankings was found to be significant at both levels; at  $\beta = 0.32, p < 0.001$  and  $\beta = 0.24, p < 0.001$  respectively – after accounting the control variables like size, location and focus of academic programs of the institution [27]. This means that the degree of implementation of OBE has an additional unique causative influence towards realization of accreditation status and other improved institutional standings.



**Figure 3: key constituents of OBE**

### Discussion:

Implication of the quantitative data analysis reveals the performance of OBE implementation on accreditation status and the ranking of institutional indicators in determining success of educational institutions. Initially, the relationship between the percentage of OBE's implementation and the accreditation status of the institutions underlines the relevance of the outcome-based education practices in enhancing the educational quality of the institution [28]. In this paper, it will be argued that learning outcomes promoted and used in institutions will be comprehensive and effective to meet the requirement of accreditation bodies, hence emphasizing of the importance of learning outcome programs. In the same manner, the positive relationship found between accreditation status and institutional rankings highlights the importance of accreditation in determining and measuring the quality and reputation of an institution. Institutional scores in assessments reflect those of accredited institutions and are assumed to be positively correlated with other credentials used in ranking methodologies since accreditation is believed to complement existing standards [29]. Such alignment indicates that accreditation is not only utilized as a tool for traditional quality assurance and improvement but also as a way of establishing institutions and embracing status as well as recognition in the larger education sector.

Furthermore, the relatively strong, positive relationship between the degree of OBE implementation and institutional rankings points towards a possible positive association of outcome-based education and the perceived reputation of the institutions [30]. Those institutions that focus on the attainment of learning outcomes as well as the demonstration of competencies among students may be considered more favourably by ranking institutions which usually target aspects of students learning fully, opportunities for the qualified graduates and efficiency in academic delivery among other factors. Competition within the higher education community is also emphasized through alignment of the OBE principles with the ranking criteria, pointing to the function of educational practices in forming perceptions of, and positions within the community.



**Figure 4: Educators Need to Know About Outcome-Based Education**

## V. CONCLUSION

Therefore, in this research, the complex relationship between Outcome-Based Education (OBE), accreditation criteria, and organizational assessments in determining the efficiency Of educational institutions has been explored. Quantitative analysis, qualitative examination and review of existing literature revealed important principals about the connections/alliances amongst these components. The quantitative study also showed that there exist significant positive relationships between the implementation of OBE, accreditation and ranks, implying that quality outcomes assessment models are central to defining institutional quality and reputation. Furthermore, the use of qualitative research contributed to the understanding of details in regard to how and why OBE, accreditation, and rankings work or do not work for educational stakeholders. This paper also provided a further understanding of these findings within the general body of knowledge on educational quality assurance, quality improvement, and globalization. In summary, this study advances knowledge in the ways factors that drive and constrain educational systems and aids in providing solutions for enhancing quality and competency of universities. As the focus on outcomes, accreditation procedures, and rankings grows, the educational institutions are further empowered to meet the needs of the global society and equip learners for future challenges. There is a need to smoothly and persistently evaluate, modify, and create strategies to implement changes in education that will align with the needs and extent of varied constituents.

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