The Effect of Outcome Based Education on Behavior of Students

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Abstract:
Outcome-Based Education (OBE) is a pedagogical approach that focuses on defining learning outcomes and aligning instructional practices to achieve those outcomes. Its implementation has garnered attention for its potential impact on various aspects of student behavior. Research exploring the effect of Outcome-Based Education on student behavior indicates several key findings. Firstly, students exposed to OBE demonstrate increased engagement and motivation due to clear learning objectives and assessments. Secondly, OBE fosters a sense of accountability and responsibility among students as they are actively involved in their learning process. Additionally, studies suggest that OBE contributes to the development of critical thinking and problem-solving skills, leading to more adaptive behaviors in academic settings. The findings underscore the significance of Outcome-Based Education in shaping positive behaviors among students. By promoting active participation and fostering essential skills, OBE holds promise for enhancing overall academic performance and fostering a conducive learning environment. These implications extend beyond the classroom, potentially influencing students’ behavior in various life domains. Future research should delve deeper into the mechanisms through which Outcome-Based Education influences student behavior. Longitudinal studies could explore the sustainability of these effects over time and across diverse student populations. In conclusion, the research on the effect of Outcome-Based Education on student behavior suggests a positive association between OBE implementation and desirable behavioral outcomes. By promoting engagement, accountability, and critical thinking skills, OBE has the potential to cultivate adaptive behaviors conducive to academic success and lifelong learning. Further investigation into this relationship is warranted to inform educational practices and policies effectively.
Keywords: Outcome-Based Education, Student Behavior, Pedagogical Approach, Learning Outcomes and Academic Performance.

Introduction
Outcome Based Education (OBE) is a shift from teacher-centric to student-centric teaching and learning, focusing on learners' success. In the Philippines, LPU-B has been implementing OBE since 2011, addressing challenges like insufficient resources and an unestablished system. This study assesses OBE implementation in the College of International Tourism and Hospitality Management, aiming to improve quality education (Felicen, 2021). The quality of an educational system can be evaluated from three perspectives: inputs, processes within the system, and outputs. Outcomes-based education (OBE) focuses on learning, teaching, and systemic structures. It emphasizes performance indicators and less tangible outcomes. OBE is influenced by the concept of educational accountability and the belief that all students have potential to learn and succeed (Killen, 2000). Higher learning institutions are adopting e-learning to evaluate teaching quality and compete globally. Outcome-based education (OBE) has gained recognition internationally, but its implementation in Malaysia is still in its early stages. Despite mixed reactions, OBE has gained prominence in countries like the USA, Canada, Australia, New Zealand, South Africa, Hong Kong, and Malaysia (Akir, Eng, & Malie, 2012). Malaysia faces numerous issues in higher education, including graduates' ability to meet industry needs, high unemployment rates, and unaccredited programs. Implementing outcome-based education (OBE) is a controversial topic, requiring significant adjustments to institutional policies and procedures. This study investigates the impact of OBE incorporating technology innovation on a public university in Malaysia (Eng, Akir, & Malie, 2012). Education is crucial for a country's development, and poor academic performance among form four accounting students in Sarawak, focusing on the relationship between attitude factors and their academic performance (Pradhan, 2021). The Time-on-Task hypothesis, developed by Carroll in 1963, suggests that learning is directly related to the amount of time spent on a task. However, current research shows a generally positive relationship between time spent on task and achievement, but the strength of correlations fluctuates widely. This variability may be due to the variety of ways time has been operationalized, such as attention, classroom time, schooling time, or years of schooling. Karweit and Slavin's 1981 study found that the manner in which time is operationalized influences the relationship between time and learning. It highlights the need to examine individual differences factors, such as interest in the subject matter and student aptitude, which may contribute to the amount of time needed to master course content (Godwin et al., 2016).

Outcome-Based Education (OBE) is a modern educational approach that focuses on developing professional competencies and knowledge acquisition among students. It bridges traditional teaching methods with outcome-driven learning strategies, promoting effective management, innovation, and academic achievement. OBE enhances student behavior, fostering a culture of innovation and preparing individuals for success in the future (Saha, Akber, & Roy, 2023). One of the study at Guangdong Ocean University evaluates the effectiveness of Outcome-Based Education (OBE) in enhancing students' communication skills for workplace success and societal engagement. The research provides valuable insights into the practical viability of OBE methodologies in fostering communication skills (Zhang & Fan, 2020). And PolyU initiated a Curriculum Revision initiative in 2005-2006 to overhaul academic programs...
based on outcome-based education (OBE). The initiative was initiated following the University Grants Committee's Second Round Teaching and Learning Quality Process Reviews. A research team was formed in 2006 to evaluate the impact of OBE on student performance within the Faculty of Construction and Land Use (FCLU). The revised curricula emphasized learning outcomes, professional competencies, and core skills for holistic development (Chan & Chan, 2009). The Canadian Engineering Accreditation Board (CEAB) has mandated all Canadian engineering programs to transition to outcome-based education (OBE) by June 2015. OBE focuses on defining graduation learning outcomes, but implementation can be challenging due to course objectives differing from broader program objectives. This research assesses faculty attitudes and readiness for the transition (Akhmadeeva, Hindy, & Sparrey, 2013). Afghanistan's education system, damaged by wars, requires improvement through outcome-based education (OBE). The Ministry of Higher Education trains teachers on OBE, but challenges persist. Current curricula and policies need revision, and teachers need new methodologies. MoHE sends teachers to Malaysia for OBE and Student-Centred Learning training, but many struggle to implement OBE-SCL (Maleki, 2021). Pakistan's education system has seen a 10% increase in literacy rate within six years, but the government's focus on Sustainable Development Goals has led to poor educational outcomes. Investment in education can stimulate economic prosperity and growth. Outcome-Based Education (OBE) has gained attention in Pakistan, but traditional teaching methods still dominate. This review emphasizes the need for a shift from teacher-centered to outcome-based education in Pakistan's tertiary education system and addresses major factors impacting student learning outcomes (Asim, Vaz, Ahmed, & Sadiq, 2021). Outcomes-Based Education (OBE) is a curriculum planning model that prioritizes student-centric learning and specific outcomes. It shifts from teacher-centric to student-centric education, aiming to develop knowledge, competencies, and qualities as students finish school and face challenges. OBE can function at various levels of instruction, but it contradicts the idea of education as induction into knowledge (Naskar, 2023). Education is a process that transfers knowledge, skills, and habits from one generation to the next through teaching, training, or research. Academic achievements are the outcome of education, often measured by examinations or continuous assessments. Teachers, students, and books are the basic pillars of education, bringing positive changes to society. Parents play a vital role in child academic socialization, influencing interest, skills, reading habits, and behavior. Physical activity and language play a vital role in the best academic environment. Academic performance is influenced by factors such as interest, teaching methodology, schooling, age, home and society environment, trends, and issues. Essential learning provides a base for high-stage learning (Said, Idris, & Hussain, 2018). Outcome-Based Education (OBE) is a method of assessing university students' performance based on their outcomes, similar to the total quality movement in business and manufacturing. OBE promotes constructivist curricula and assessment, focusing on student competence rather than resources. It has been adopted by many students in various countries and is considered an integral part of educational institutions. Industry-partners value graduates' competence in research, work discipline, communication, computer skills, and entrepreneurial skills. Management must ensure facilities and services are available and in good condition to facilitate learning between teachers and students and Education is a lifelong journey, aiming to equip individuals with skills and knowledge to navigate the world. Outcome-Based Education (OBE) is a shift towards total quality, focusing on determining desired outcomes and planning backwards. OBE instruction measures student performance through outcomes, demonstrating acquired skills and knowledge. Despite criticisms, OBE has been adopted in various countries, enhancing educational quality and relevance to the workplace. Empirical research is crucial to evaluate OBE's impact and inform educational practices, allowing institutions to optimize

Methods and Methodology
The effect of outcome-based education (OBE) on student behavior was investigated through a meticulously designed research methodology employing diverse scientific and reliable sources. To ensure the advancement of this study to the forefront of research, an array of scholarly literature and empirical evidence was meticulously curated and synthesized. By incorporating established methodologies and drawing upon a wide range of authoritative materials, this investigation sought to delve into the intricate relationship between OBE and student behavior, with a particular emphasis on exploring potential causal mechanisms and nuanced dynamics. An array of scientific and reliable sources were rigorously employed to investigate the impact of outcome-based education (OBE) on student behavior. By adhering to established research protocols and synthesizing a comprehensive range of literature, this study aimed to propel the understanding of OBE's influence on student behavior to the cutting edge of research. Through the systematic analysis of various scholarly works and empirical findings, this research endeavors to shed light on the intricate interplay between OBE principles and student conduct, thereby contributing to the ongoing discourse in educational psychology and pedagogy.

Navigating Success: The Impact of Outcome-Based Education on Student Behavior and Learning Achievement
Effective learning for every student serves as both the foundation and ultimate goal of outcome-centered planning. Therefore, all instructional decisions should be informed by a consideration of which methods are most likely to bolster students' endeavors toward achieving the desired learning outcomes. One highly effective approach, inspired by Vickery's recommendations (1988), encompasses the following steps:
1. Begin by assessing students' existing knowledge and skills. If they lack essential prior knowledge or necessary skills, it's imperative to provide instruction on these prerequisites.
2. Subsequently, equip students by elucidating the outcomes they are expected to attain upon successfully completing the unit. Each outcome must be contextualized and linked to one or more Key Competencies to hold significance.
3. Employ various instructional methods, whether whole-class instruction or individual/group work, that are deemed most conducive to facilitating mastery of the unit for all students.
4. Organize guided practice sessions to allow informal evaluation and furnish feedback to enhance learning. The emphasis here lies on successful guided practice achieved through meticulous selection of examples and problems.
5. Once most students appear prepared to exhibit mastery, evaluate their learning either through formal assessment or by empowering students to assess their own progress via self-assessment or peer assessment. This evaluation should consider the context in which outcomes are to be demonstrated.
6. Students who achieve mastery can then engage in enrichment activities, while those who haven't yet mastered the material receive additional instruction and practice.
7. All students subsequently undertake a summative test. Those unable to demonstrate mastery receive an "incomplete" grade, which they must improve to a mastery level through further effort. Students are encouraged to take ownership of their learning, with ongoing teacher support contingent upon their acceptance of this responsibility. This flexible approach can be adapted to suit specific subjects and student groups. It's important to note that teachers shouldn't anticipate instant success with outcomes-based programming. Particularly, they may need to gradually introduce the concept that while teachers create conducive learning environments, students ultimately bear

Table 1. Summary Table on Effectiveness of OBE Implementation

<table>
<thead>
<tr>
<th>Aspects</th>
<th>WM</th>
<th>VI</th>
<th>Rank</th>
</tr>
</thead>
<tbody>
<tr>
<td>Relevance of the Course</td>
<td>3.71</td>
<td>HE</td>
<td>1</td>
</tr>
<tr>
<td>Course Organization and ILOs</td>
<td>3.65</td>
<td>HE</td>
<td>4.5</td>
</tr>
<tr>
<td>Teachers and TLAs</td>
<td>3.67</td>
<td>HE</td>
<td>2</td>
</tr>
<tr>
<td>Assessment</td>
<td>3.66</td>
<td>HE</td>
<td>3</td>
</tr>
<tr>
<td>Learning environment</td>
<td>3.61</td>
<td>HE</td>
<td>6</td>
</tr>
<tr>
<td>Counselling</td>
<td>3.65</td>
<td>HE</td>
<td>4.5</td>
</tr>
<tr>
<td>Composite Mean</td>
<td>3.66</td>
<td>HE</td>
<td></td>
</tr>
</tbody>
</table>

Legend: 3.50 – 4.00 = Highly Effective (HE); 2.50 – 3.49 = Effective (E); 1.50 – 2.49 = Less Effective (LE); 1.00 – 1.49 = Not Effective (NE)


How Behavioral Factors Affect Students' Learning Outcomes

Attitude
In line with the Fourth Edition of the House Dictionary (2010), an attitude denotes a behavior or action rooted in an opinion. It also encompasses an individual's temperament, actions, feelings, inclinations, and aversions toward a specific matter, as well as their readiness and inclination to engage in actions (Noorafini et al., 2017). For the context of this study, attitudes refer to the behaviors exhibited by form four students in accounting classes, whether positive or negative, which influence their academic performance in the Ikhtisas Elective Subject (MPEI) Accounting Principles (PP).

Elective Subjects
Ikhtisas Principles of Accounting: As per the Secondary School Standard Curriculum (KSSM) 2016, the Ikhtisas Elective Subject (MPEI) Accounting Principles (PP) is an optional course designed for form 4 and 5 students within the Ikhtisas Humanitarian group. MPEI PP aims to cultivate students with high employability by fostering knowledge and proficiency in accounting, accountability, ethics, reflective and critical thinking, as well as information technology and communication skills. This elective subject provides students with opportunities to apply acquired knowledge and skills in real-life and career contexts.

Performance
Performance refers to the outcomes of an individual's efforts in comprehending and mastering a subject, beyond mere acquisition of knowledge, including the application of learned concepts. At the secondary level, assessment of students' achievements relies on the Content Standard (SK) and Performance Standards (SP). Teachers use SP assessments to gauge students' mastery levels across cognitive, psychomotor, and affective domains, utilizing detailed rubrics. This study focuses on the performance of form four accounting students in MPEI PP, specifically examining Topic 8 within the Content Standard, referencing the Performance Standard detailed in the International Journal of Advanced Education and Development (Masaha & Jamaluddin, 2023, Asim et al., 2021, Godwin et al., 2016, Rao, 2020).

PARADIGM SHIFT: From Teacher-Focused to Learner-Focused Approach
In the journey towards Outcome-Based Education (OBE), educators are increasingly recognizing the importance of their coaching methods and strategies in gauging learners'

### Table 2. Teacher-Focused to Learner-Focused Approach

<table>
<thead>
<tr>
<th>Conventional Education</th>
<th>Outcome Based Education</th>
</tr>
</thead>
<tbody>
<tr>
<td>What are the methods we use as educators</td>
<td>What our learners are capable of and what they have become</td>
</tr>
<tr>
<td>Teaching through inputs and contents</td>
<td>Learning through the showing of abilities and results</td>
</tr>
<tr>
<td>Teaching and Learning (TLA) as the goal</td>
<td>Using teaching and learning (TLA) as a tool to achieve a goal</td>
</tr>
<tr>
<td>Results depend on practice.</td>
<td>Results guide the practice.</td>
</tr>
<tr>
<td>Learning is confined to textbooks and worksheets and is teacher-centered.</td>
<td>Learning is learner-centered, and the instructor frequently promotes and uses teamwork to solidify the new strategy.</td>
</tr>
<tr>
<td>The syllabus is strict and non-negotiable in the teacher’s eyes.</td>
<td>Teachers can be imaginative and creative in building their programs with the help of learning programs, which are viewed as guides.</td>
</tr>
<tr>
<td>Learning is the instructor’s responsibility, and the teacher’s personality affects student motivation.</td>
<td>The instructor is in charge of teaching, and the teacher’s personality influences students’ motivation.</td>
</tr>
</tbody>
</table>

**Source:** Saha, Akber, & Roy, 2023

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**1st Paradigm Shift: Transitioning from a Teacher-Focused to a Learner-Focused Approach**

The initial paradigm shift necessitates a change in mindset among educators and educational leaders, emphasizing a transition from a trainer-focused to a learner-focused training strategy. This evolution, as emphasized by various sources, underscores the contrast between results-based and traditional content-based educational approaches.

**2nd Paradigm Shift: Embracing an Outcomes-Oriented Perspective**

The second paradigm shift underscores the imperative of grounding every aspect of education within an outcomes-oriented framework. Bresciani highlights the importance of aligning evaluation methods and tactics with desired training outcomes, advocating for intentional and deliberate assessment procedures. This approach, as proposed by Spady, involves continuously, deliberately, creatively, and simultaneously integrating outcome-based education principles into educational practices (Saha, Akber, & Roy, 2023, Godwin et al., 2016, Masaha & Jamaluddin, 2023, Akramy, 2021, Pradhan, 2021). Outcome-based Education: An Outline. A study comparing cohorts from different academic years found significant differences in assessment scores among students. Students from cohort 2004/07 exhibited higher self-ratings in life-long learning, entrepreneurship, creative thinking, and global outlook compared to cohorts 2006/09 and 2005/08. No significant interaction effect was found between year of study, gender, and department. Female students showed higher self-ratings in several competencies compared to male students. Improvement in communication was significant over time in year 2 and year 3 (Zhang & Fan, 2020, Naskar, 2023, Maleki, 2021).

**Planning Effects on Social Behaviour and Academic Performance**

Teachers who engage in thorough planning and activity design before entering the classroom tend to exhibit higher confidence levels in
employing various teaching methodologies, thus facilitating an easier understanding of topics for students. This proactive approach to planning not only enhances teaching effectiveness but also contributes to improved social behavior within the classroom environment. Effective planning assists in classroom management and student engagement, fostering a more productive learning atmosphere.

Visualization Effects on Social Behaviour and Academic Performance: Visualization enhances children's learning experience by promoting active participation, comprehension, and motivation. It also fosters a genuine desire for learning, making it a lifelong learning catalyst, according to Lee (2006).

Stress Effects on Social and Academic Performance: Stress can be a catalyst for achievement, motivating students and teachers towards goals. However, excessive stress can lead to frustration and negative attitudes. Effective management can provide energy and drive for productivity (Said, Idris, & Hussain, 2018, Rao, 2020).

Discussion

Outcome based education (OBE) emphasizes the importance of outcomes of learning, focusing on students' outcomes rather than their teachings. This paper presents a method for writing outcomes for general higher education programs, defining them at program, program-specific, and course levels. Outcomes should be observable and measurable, using Bloom's taxonomy of learning and Revised Bloom's cognitive domain. Course outcomes should be structured around action, knowledge elements, conditions, and criteria, facilitating computation of attainment (Rao, 2020). Behavior, an individual's response to stimuli, is influenced by learning challenges like social media, poverty, and stress. Social theorists suggest humans are not mindless robots, but thinkers, and behavior is learned through observational learning. Chronic stress damages the brain's learning ability, making it more sensitive to memory modulation (Katopola & Otmar, 2016). The learning process involves both teachers and students, requiring diverse methods, creativity, effective classroom management, and assessment systems. Students should use their learning style, and teachers should be creative in providing materials. A supportive learning atmosphere, teacher behavior, and various factors are essential for improving student outcomes. Behavioral problems should be addressed by teachers or psychologists to ensure positive learning behaviors (Azhary et al., 2020).

The qualitative study by Akramy (2021) explores the impact of Outcome-Based Education (OBE) on student behavior in Afghanistan. It emphasizes the importance of aligning teaching practices with OBE principles to achieve desired learning outcomes. The study suggests policymakers and stakeholders should support teachers' efforts by making curriculum changes, providing autonomy in selecting materials, and organizing capacity development workshops. However, the study's limitations, including a small sample size and limited scope, may limit its generalizability. Future research should include a broader sample and diverse research instruments (Akramy, 2021). The EPOBE structure is an engineering training framework based on Graduate Attributes, OBE framework, and strengthening engineering pedagogy. It provides education consistent with the macro-degree curriculum, but colleges deliver content at a micro-level. Increase pedagogy aims to increase micro-level teaching for teachers, parents, and students, ensuring knowledge is based on age in evaluation structures. Implementing OBE can be successful with the cooperation of all stakeholders, including students, teachers, employers, and authorities, to address engineering issues and provide engineering solutions (Pradhan, 2021). In education, classroom behavior can impact assessment performance. Teachers manage classrooms through various methods, and studies have identified strengths and weaknesses. Efficient beliefs and emotional support are crucial for teacher performance and student success. Emotive behavior therapy promotes instruction and fosters student-teacher relationships. Teachers with low confidence often experience unhealthy negative emotions, which hinders
building strong relationships and delivering instruction. By becoming more aware of their classroom environment, teacher and student performance improves (Kirkpatrick, 2019). In conclusion, students are professionals who navigate complex technical challenges using technological advancements. Proficiency lies in problem-solving, understanding engineering sciences, and continuous learning. Higher education programs provide aspiring students with the necessary skills for success (Shyamalaprasanna et al., 2021).

Conclusion

In conclusion, our research on the effect of outcome-based education (OBE) on student behavior underscores the significance of pedagogical approaches in shaping the conduct and attitudes of learners. Through a comprehensive analysis of diverse scientific sources and empirical evidence, we have illuminated the intricate relationship between OBE principles and student behavior. Our findings suggest that OBE, with its emphasis on clearly defined learning outcomes and student-centered approaches, can have a substantial impact on fostering positive behaviors among students. Furthermore, our study highlights the importance of considering contextual factors and implementation strategies when assessing the effectiveness of OBE in influencing behavior. While our research contributes valuable insights to the field of educational psychology and pedagogy, it also underscores the need for further investigation to delve deeper into the underlying mechanisms and long-term effects of OBE on student behavior. By continuing to explore this complex interplay between educational methodologies and behavioral outcomes, we can strive towards creating more conducive learning environments that nurture holistic development and positive behavioral traits among students.

Highlights

- Pedagogical Paradigm Shift: Delve into the transformative impact of Outcome-Based Education (OBE) on educational methodologies, marking a departure from traditional content-centric approaches towards a focus on measurable learning outcomes.
- Behavioral Modification Mechanisms: Investigate the nuanced ways in which OBE frameworks influence student behavior, encompassing self-regulation, goal setting, and metacognitive strategies.
- Assessment Dynamics: Explore the intricate relationship between OBE’s assessment strategies and student behavior, including the role of formative assessment, feedback loops, and competency-based evaluations.
- Social and Emotional Learning (SEL) Integration: Examine how OBE fosters socio-emotional competencies such as resilience, adaptability, and interpersonal skills, thereby shaping not only academic performance but also socio-behavioral development.
- Learning Community Dynamics: Analyze the ripple effects of OBE on peer interactions, classroom dynamics, and teacher-student relationships, elucidating its influence on collaborative learning, communication skills, and leadership development.
- Longitudinal Impact: Investigate the lasting effects of OBE on student behavior beyond the educational setting, including its implications for career readiness, lifelong learning habits, and societal contributions.

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