A review on National Education Policy (NEP-2020), Student-Centered Learning, and Outcome-Based Education

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Abstract

To address the demands of the twenty-first century, India's National Education Policy (NEP) 2020 places a strong emphasis on revolutionary educational changes. The concepts of outcome-based education (OBE) and student-centered learning (SCL) are fundamental to this policy. This Paper investigates how these ideas can be incorporated into the NEP 2020 framework, looks at how they affect teaching and learning methods, and assesses how they might influence the educational environment for next generations. Important obstacles and methods for successful execution are also covered. Numerous chances to document global economic growth, with particular attention to emerging nations, are made possible by education. Over the past few decades, there hasn't been enough progress in educational metrics. Recently, outcome-based education, or OBE, has attracted a lot of interest worldwide. The reason OBE is used in education is that it organizes and concentrates the entire system on what every student should be able to perform at the end of their educational journey. OBE offers compelling and impactful options to organize and change medical education. Thus, this paper review's primary goal is to draw attention to the higher education system and the necessity of switching from a teacher-centered to an outcome-based educational model. The main elements that affect student learning outcomes are also included in this review. Boolean operators and important terms related to the review goals were combined to create the search methods. The report featured five studies that examined the efficacy of outcome-based education across a range of academic fields. The results point to five key elements from the literature that affect student learning outcomes: assessment methods, complexity-level-based learning objectives, students' chosen learning styles, English language competency, and industry demands.

Key words: NEP, OBE, Higher Education, Student Centered, Learning

Introduction

Global education systems are altering dramatically to meet the needs of a society that is becoming more interconnected and changing quickly. First, we provide program guidance and outline the curriculum. Next, we investigate the impact of OBE in two elective courses within the program, where completion of one course is a requirement for moving on to the next course. It moves the emphasis from memorization to creativity, critical thinking, and lifelong learning. It is difficult to

switch from a traditional knowledge-based education (KBE) curriculum to the OBE method because it requires us to clearly identify outcomes and map those outcomes to the expected abilities of students. This paper looks at how the NEP incorporates the principles of student-centered learning and outcome-based education and their combined impact on learners **(Rao et al., 2019).**

According to Padli (2022), OBE-based learning, as mentioned in Haryani, is student-centered, with evaluation focusing on student performance through learning objectives that include cognitive, psychomotor, and affective attitudes. Of these learning objectives, the psychomotor component—what the students do—is given more weight in deciding their grades **(Dewi, 2023; Crespo et al., 2010).**

Students are exposed to the curriculum via the educational system over a certain amount of time. Even when it is acknowledged that every student has mastered the information being taught, tests are nonetheless given at the conclusion of the session, and grades are given to the pupils. The tactics or strategies that have been employed in education up to this point must be reevaluated and, if required, changed to fulfill the increasing demands for education **(Putri, 2019).**

The outcomes not only achieve good results but also ensure a clear, focused, and organized education system that is focused on the skills that every student should possess at the conclusion of their educational journey. In the US, outcome-based education, or OBE, has become the focus of educational reform. Students of the current age are looking for an educational strategy that considers their future employment opportunities in addition to building a theoretical basis **(Sabarudin & Wan, 2010).**

In Indonesia, outcome-based education, or OBE, has recently attracted a lot of interest. The reason OBE is used in education is that it concentrates and arranges all aspects of the educational system according to the skills that every student should possess at the conclusion of their educational journey **(Spady, 1994).**

Thus, this research's primary goal is to draw attention to the higher education system and the necessity of switching from a teacher-centered to an outcome-based educational model. The main elements that affect student learning outcomes are also included in this review. We also hope to offer suggestions for further study. Given the growing popularity of outcome-based education in Indonesia and the urgent need to assess the variables influencing student learning outcomes, the current review provides a thorough summary of the main idea.

This research has significant implications for the field of science. By conducting a literature review and analyzing case studies on the implementation of Outcome Based Education (OBE) in various

countries such as India, Hong Kong, the Philippines, Malaysia, and Indonesia, this research provides valuable insights into the effectiveness and challenges of adopting the OBE approach in different educational contexts. These findings can contribute to advancing the field by providing a comprehensive understanding, identifying success factors, highlighting possible challenges and solutions, and informing policy decisions and curriculum development. Thus, this research has the potential to enhance science education by promoting a student-centered approach that leads to the achievement of desired learning outcomes.

Methodology:

Most of the learning strategies used today still center on input. Students are exposed to the curriculum via the educational system over a certain amount of time. Even though every student has mastered the information being taught, tests are nevertheless given at the end of the session, and grades are given to the pupils. It is necessary to alter the educational system's viewpoint and methodology. In addition to producing positive results, the outcomes should guarantee an organized, well-defined educational system that is focused on the skills that every student should possess at the conclusion of their educational journey. In the US, outcome-based education, or OBE, has become the focus of educational reform.

Students in the current age are looking for an educational strategy that emphasizes future employment opportunities in addition to developing a theoretical basis (Sabarudin & Wan, 2010). Other nations have also progressively begun to support this strategy. The OBE model was selected and implemented in South Africa because it places a strong focus on elements like problem solving, idea generation, and skill acquisition that are meant to produce capable and clear thinking people (Botha, 2002). In Malaysia, however, the shift from a traditional teaching methodology to an emphasis on student learning outcomes has finally grown to be a noteworthy aspect that cannot be disregarded **(Mohayidin et al., 2008).**

The reason OBE is used in education is that it organizes and concentrates the entire system on what all students should be able to perform at the end of their learning journey (Spady, 1994). Teachers around the world have now come to understand that learning is more than just imparting information. It entails using the cognitive processes of knowledge formation, which are heavily impacted by social, emotional, and cultural elements. Traditional teaching practices continue to dominate Indonesia's educational system, with pupils being taught the required curriculum using traditional teaching techniques.

Thus, the main goal of this review is to draw attention to Indonesia's higher education system and the necessity of switching from a teacher-centered to an outcome-based system. The main elements that affect student learning outcomes are also included in this review. We also hope to offer

suggestions for further study. Given the growing popularity of outcome-based education in Indonesia and the urgent need to assess the variables influencing student learning outcomes, the current review provides a thorough summary of the main idea.

Data Analysis:

To find unpublished gray literature and overlooked items in the databases, a thorough search was carried out. Boolean operators and important terms related to the review goals were combined to create the search strategy. Results-Based Education was found using the following search terms: "outcome-based education," "active learning approach," and "assessment outcome-based." The English language and works published between 2014 and 2021 were among the filters used. Peer-reviewed journals published the publications that were included.

A total of five (5) studies were included in the paper on the effectiveness of Outcome- Based Education in various educational disciplines conducted in different parts of the world, as indicated in Table 1. The main factors that can influence student learning outcomes were also analyzed and categorized into five important factors in developing countries. These themes include learning objectives based on Bloom's Taxonomy, assessment methods, learning styles, and industry requirements for graduates. These themes will be discussed individually in the following sections.

Table 1

Main factors influencing student learning out comes

| Authors	Location	Purpose	Study Design	Conclusion
(Dai et al.,2017)	Hong Kong	assessing how outcome-based assessment affects teachers' and students' actual teaching strategies.	Quantitative	Both faculty teaching methods and student learning outcomes are greatly enhanced by outcome-based education.
(Imeldal.An ,2014)	Philippine	might assess how well OBE works for pupils by looking at how their performance and behavior improve after using OBE techniques.	Descriptivestudy	Regardless of age or gender, OBE instruction can be adopted and learnt for a new educational system based on the results produced. Any accounting student who is prepared to adjust to the new curriculum benefits from it.

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(Tanetal.,2018)	Malaysia	To collect and present the best available data on how well outcome-based approaches affect nursing students' competency levels.	SystematicReview	OBE initiatives were found to have a positive impact on nursing students' abilities. Key outcome measures were determined to be improvements in attitudes, nursing abilities, and knowledge acquisition.
(de Guzmanet al., 2017)	Philippines	To fully understand the specifics of outcome-based education and how it is applied in technology.	DescriptiveandQuantitative	Although there was a moderate level of knowledge regarding curriculum alignment and mapping as well as the creation of Program Educational Objectives (PEOs) across various colleges, faculty members reported having the majority of their knowledge about OBE, especially with regard to the use of various techniques for assessing student learning. .
(Rahayuetal.,2021)	Indonesia	Assessing the elements of outcome-based learning in an EFL classroom: an examination of lesson plans	Qualitative	To align and modify educational methods and procedures in accordance with the intended learning outcomes, schools need academic organization.
(Bagbanetal., 2017)	India	exploring several innovative approaches to student evaluation.	Descriptivestudy	Achieving course outcomes has been made easier by the mix of project-based assessment and traditional evaluation. There is also discussion of the benefits and drawbacks of both innovative and conventional assessment methods. Additionally presented are the findings of a survey that was done on several methodologies.

OBE can be applied to other disciplines and offers compelling and influential possibilities for arranging and changing medical education (Dai et al., 2017). One of the factors contributing to the quick proliferation of different forms of OBE in nations like Malaysia, the US, Australia, South Africa, and many more is the idea of accountability (Akir et al., 2012).

OBE is not just a recommended teaching strategy but also a crucial part of education, especially when it comes to the teaching and learning process. It places a strong emphasis on results, allowing for the measurement, validation, and improvement of student accomplishments (de Guzman et al., 2017).

The development of more structured, creative, and flexible teaching strategies is one of OBE's initial effects and advantages. Project-based learning, for instance, will be encouraged, and professional attitudes and abilities will be developed. Additionally, educational establishments constantly monitor and pay close attention to the caliber of graduates they generate and release onto the market. OBE's primary idea—evaluating what is required to accomplish and attain learning outcomes—has been described in a variety of ways, much like other educational concepts. OBE was first conceptualized in the early 1980s, and since then, models for curricular design have been created and improved upon (Balid et al., 2012). OBE is a thorough teaching and learning approach that prioritizes student performance and output at the conclusion of the learning process. Spady invented the fundamental idea of OBE and played a key role in creating the theoretical and foundational framework of the concept.

Figure1.
Mind mapping
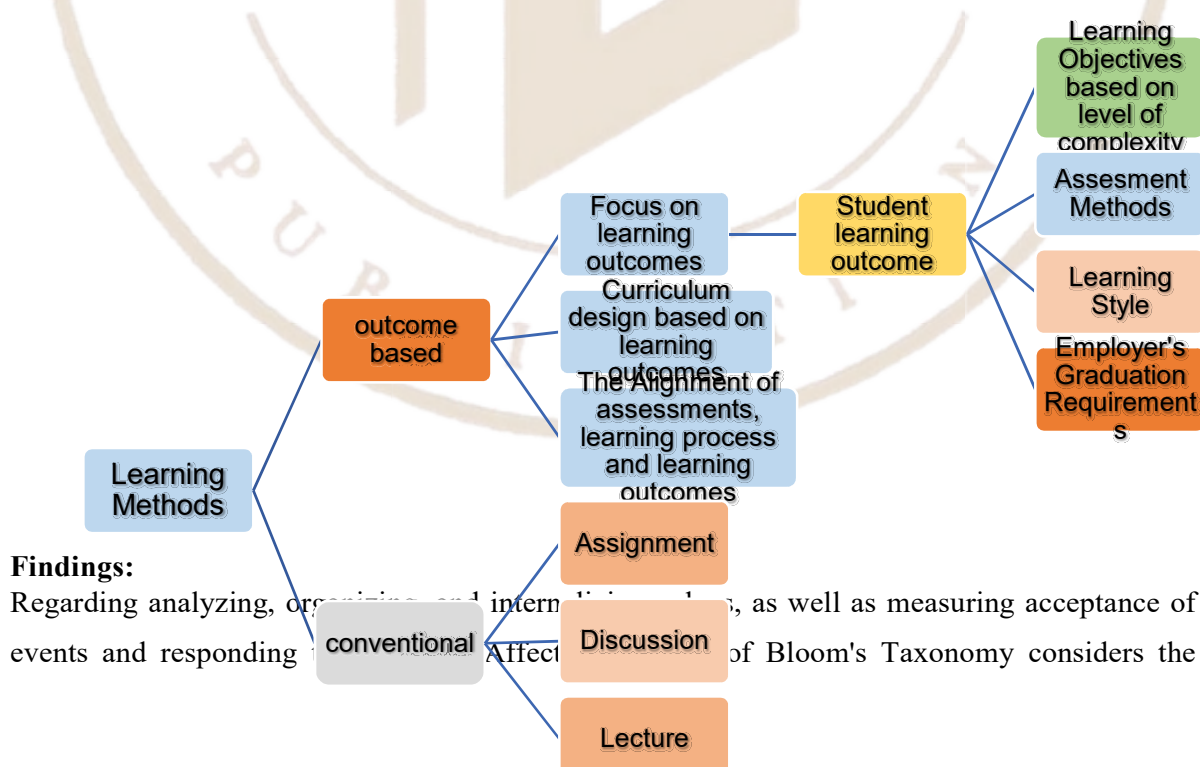
Findings:

Regarding analyzing, organizing, and internalizing values, as well as measuring acceptance of events and responding to external Affective Domain of Bloom's Taxonomy considers the

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different degrees of simplicity to complexity (Krathwohl et al., 1964).Hughes and Batey (2017). According to Lu et al. (2020) and Lynn Lease (2018), pupils who are at the lowest level of the affective domain—"receiving"—passively pay attention. This level is necessary for learning. The Psychomotor domain, the last in Bloom's taxonomy, begins with perceptual evaluation and moves through the following levels: set, guided reaction, mechanism, complicated overt response, adaptation, and origination (Hoque, 2016) (Anderson et al., 2001).

There are many different categories for assessment, and most of them make sense. Classifying assessments as diagnostic, formative, or summative is a helpful way to organize them (Sukanti, 2011). Diagnostic evaluations are techniques for evaluating pupils that are connected to and carried out prior to their exposure to educational interventions (Indarti et al., 2015). According to Jaafar et al. (2010), the primary objective of these assessments is to maximize the learning process by evaluating students' educational needs.

According to outcome-based assessment, the evaluation procedure and the learning objectives must coincide. This implies that it should both validate the attainment of the intended learning outcomes at the conclusion of the process (summative assessment) and assist students in theirprogress (formative assessment). Additionally, it implies that the evaluation procedure ought to be modified based on the kind of results that need to be evaluated (Jaafar et al., 2010).

An essential component of the teaching and learning process is student assessment. Appropriate evaluation methods are used to guarantee successful learning. Making sure that the desired course outcomes and subsequent program outcomes are met is essential with the rise of outcome-based education (OBE). To measure various course outcomes, a variety of assessment methods are used (Bagban et al., 2017).

According to a survey on graduate recruiting and skills, the majority of financial sector businesses give preference to graduates based on their general skills, motivation, adaptability, analytical abilities, and general traits rather than their specialized knowledge and core specializations. Concerns over recent graduates' lack of experience and job preparation have also been reported in the literature in the last ten years, highlighting the substantial demand for general skills and qualities from employers (Pittaway &Thedham, 2005). Prihadi clarifies that vocational curriculum and learning should be updated frequently in accordance with the advancements, modifications, and innovations in the workplace in order to guarantee that the conclusions are always connected and matched with the demands of the modern labor market (**RachmadPrihadi, 2019**).

Recommendations:

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To update the challenges, the following things are recommended:

- ➢ Comprehensive teacher training programs,
- ➢ frameworks for equitable resource distribution,
- ➢ ongoing monitoring and feedback systems
- ➢ Engagement of the community and stakeholders.

Conclusion:

A paradigm shift in Indian education is represented by the NEP 2020's emphasis on outcome-based learning and student-centered learning. Although there are still obstacles to overcome, smart execution and stakeholder cooperation can turn this vision into a reality and prepare students to succeed in a changing world. By assessing the efficacy of Outcome-Based Education (OBE) and pinpointing important variables that affect student learning outcomes, the main goal of this review advances the area of education. Practical issues for implementing OBE are highlighted by the focus on the role of educators in creating the best possible learning environment and encouraging motivation, information sharing, and feedback. The OBE approach's encouraging benefits on competency enhancement are also acknowledged in the review, which strengthens the argument for its application. To improve the reliability and generalizability of the results, more extensive sample sizes and rigorous procedures are required in future research, which is one of the study's shortcomings. Future research can build complete assessment tools and investigate implementation strategies by filling in the gaps in understanding implementation phases and quantifying outcomes. Resolving these issues and carrying out additional study will help us gain a more thorough grasp of OBE's efficacy and how it affects educational procedures and results.

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