



ASSESSMENT OF COLLEGE-LEVEL IMPLEMENTATION OF OUTCOME-BASED EDUCATION IN MAHARASHTRA

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ABSTRACT

The National Education Policy 2020 has brought significant changes to the Indian higher education system by emphasizing Outcome-Based Education (OBE) as a student-focused and skill-oriented framework. This chapter explores the adoption and effects of OBE among second-year undergraduate students from the Arts, Commerce, and Management streams at SNTD Women's University. The study is based on primary data collected from 300 students using a structured questionnaire with a five-point Likert scale. Various statistical techniques, including mean analysis, chi-square test, ANOVA, and regression analysis, have been applied to interpret the data. The results suggest that students from Management and Commerce streams demonstrate greater awareness and preference for OBE, whereas students from the Arts stream exhibit relatively lower acceptance levels. Furthermore, the analysis highlights a statistically significant positive association between OBE and students' perceptions of employability. However, the study also identifies certain challenges, such as inadequate faculty training and inconsistent implementation practices, indicating the need for more structured and effective institutional mechanisms.

KEYWORDS : Outcome-Based Education (OBE), NEP 2020, Student Perception, Employability, Higher Education, Likert Scale

INTRODUCTION

The National Education Policy 2020 has initiated a major shift in the Indian higher education landscape by moving away from a purely content-driven approach toward a system that emphasizes competencies, skills, and learner engagement. At the centre of this transformation lies Outcome-Based Education (OBE), which focuses on defining clear learning outcomes and ensuring that students acquire measurable knowledge and abilities by the end of a programme.

OBE is grounded in the idea that education should be organized around what learners are expected to achieve rather than what instructors intend to teach. Early theoretical contributions by William G. Spady highlighted the need to design curricula based on intended outcomes, while John Biggs introduced the concept of constructive alignment, which integrates learning objectives, teaching practices, and assessment methods into a unified framework. Subsequent academic contributions further stress that successful implementation of OBE depends on structured curriculum planning, transparent evaluation systems, and continuous monitoring of learning outcomes.

Globally, OBE has emerged as an effective framework for improving educational quality and ensuring alignment between academic programmes and labour market requirements. In India, its adoption has been reinforced through NEP 2020, which promotes multidisciplinary learning, flexible curricula, and continuous assessment linked to clearly defined outcomes. The policy also emphasizes critical thinking, experiential learning, and skill development, thereby strengthening the connection between education and employability.

Institutional support for OBE in India is further strengthened through accreditation mechanisms such as those of the National Board of Accreditation, which require outcome-oriented curriculum design. These frameworks mandate the articulation of Programme Outcomes (POs), Course Outcomes (COs), and Program Specific Outcomes (PSOs), along with systematic measurement of their attainment. As a result, OBE has been more effectively integrated into professional disciplines such as engineering and management, where learning outcomes can be directly linked to industry requirements.

Research evidence in the Indian context suggests that OBE contributes positively to student engagement, academic achievement, and perceptions of employability. Students

increasingly prefer programmes that offer practical exposure, skill development, and clear career pathways. However, the transition to OBE is not without challenges. Issues such as insufficient faculty training, lack of standardized assessment tools, and institutional constraints continue to limit its effectiveness. These challenges are particularly evident in traditional disciplines such as Arts, where defining and assessing outcomes may be less straightforward.

Despite a growing body of research, most studies have focused on professional and technical education, leaving a gap in understanding how OBE functions across multiple academic streams within a single institution. This gap becomes even more relevant in the context of women's universities, where socio-economic and institutional dynamics may influence educational choices and outcomes. In this regard, SNTD Women's University offers a unique case for analysis. As one of the pioneering institutions in women's education, the university has been an early adopter of NEP 2020 reforms, including the restructuring of curricula based on outcome-oriented principles.

The presence of diverse faculties such as Arts, Commerce, and Management within the university provides an opportunity to examine variations in student responses to OBE. Programmes in Commerce and Management, which are closely aligned with professional skills and industry demands, are likely to show stronger student preference under an outcome-based framework. In contrast, Arts programmes may reflect a more gradual adaptation as they incorporate interdisciplinary and skill-oriented approaches.

Against this background, the present study adopts a survey-based empirical approach to examine the influence of OBE on student perceptions, preferences, and enrolment decisions. Data have been collected from students across the three faculties using a structured questionnaire designed to capture awareness of OBE, preference for outcome-oriented courses, and perceived employability benefits. Quantitative methods are employed to systematically analyse the relationship between OBE adoption and student decision-making.

The study proceeds on the premise that programmes aligned with clear outcomes are more attractive to students because of their direct relevance to employment opportunities and career growth. By analysing student perceptions and enrolment trends within SNTD Women's University, the research aims to generate empirical evidence on the effectiveness of OBE within the framework of NEP 2020.

In summary, the transition toward Outcome-Based Education represents a significant evolution in the Indian higher education system, bringing it closer to global standards of quality, accountability, and relevance. While the conceptual and policy foundations of OBE are well established, its success ultimately depends on how effectively it is implemented at the institutional level. This study contributes to the existing discourse by offering empirical insights into student behaviour and academic choices in an outcome-based system, along with practical implications for policymakers and educational institutions.

Review of Literature

Outcome-Based Education has gained increasing attention in India, particularly after the introduction of the National Education Policy 2020, which advocates a shift toward competency-based and student-centric learning. The theoretical underpinnings of OBE are rooted in the work of William G. Spady, who emphasized outcome-focused curriculum design, and John Biggs, who highlighted the importance of aligning teaching, learning, and assessment processes.

Within the Indian context, conceptual studies have examined both the potential and the limitations of OBE. Some scholars describe it as a flexible and adaptive framework capable of transforming higher education, while others point out the need for significant institutional restructuring to support its effective implementation. Research also indicates that OBE can enhance student engagement, provided that teaching practices evolve to support active and experiential learning.

Empirical studies generally report positive outcomes associated with OBE, including improvements in academic performance, skill acquisition, and overall learning effectiveness. The approach has been found to integrate theoretical knowledge with practical competencies, making education more relevant to real-world applications. However, several studies also identify persistent challenges such as inadequate faculty preparedness, absence of uniform assessment standards, and resource limitations.

The implementation of OBE has been particularly successful in professional disciplines, especially engineering, largely due to accreditation requirements set by the National Board of Accreditation. Research in this area highlights the importance of outcome mapping, programme evaluation, and continuous monitoring of learning achievements as key components of successful implementation.

From a global perspective, OBE is widely recognized for its role in aligning education systems with labour market needs and enhancing employability. Institutional-level studies further confirm that outcome-based frameworks influence student preferences by encouraging enrolment in programmes that offer practical skills and clear career opportunities.

In brief, the existing literature establishes OBE as a transformative approach with strong theoretical support and growing empirical validation. At the same time, it underscores the importance of capacity building, faculty development, and robust evaluation mechanisms to ensure its effective implementation. Despite these insights, there remains a noticeable lack of primary data-based research focusing on women's universities, particularly SNDT Women's University. The present study seeks to address this gap by providing empirical evidence from a multidisciplinary institutional context.

Objectives of the Study

The main objectives of this chapter are as follows;
To examine students' awareness of OBE under the National Education Policy 2020

To analyze the impact of OBE on students' course selection
To compare students' perceptions across the Arts, Commerce, and Management faculties
To assess the relationship between OBE and students' perceptions of employability
To provide policy recommendations for the effective implementation of OBE

Hypotheses

H₁: There is a significant association between OBE awareness and faculty choice.

H₂: OBE has a positive impact on perceived employability.

H₃: There is a statistically significant difference in OBE perception across faculties.

Methodology

The present study employs a descriptive as well as analytical research design, relying on primary data to investigate how Outcome-Based Education (OBE), introduced under the National Education Policy 2020, influences students' perceptions and their preferences regarding course selection. The research is situated within SNDT Women's University and focuses on undergraduate students from the Arts, Commerce, and Management faculties.

To ensure balanced representation across academic streams, a stratified random sampling technique has been adopted. The total sample consists of 300 second-year undergraduate students, with 100 participants selected from each faculty. This approach allows for meaningful comparison among disciplines while improving the reliability and validity of the findings.

Table 1: Faculty-wise Responses with Weighted Mean

1. Awareness of OBE Concepts							
Faculty	1	2	3	4	5	Total	Weighted Mean
Arts	10	20	35	25	10	100	3.05
Commerce	5	10	25	40	20	100	3.60
Management	2	8	15	45	30	100	3.93
2. Teaching-Learning Experience							
Faculty	1	2	3	4	5	Total	Weighted Mean
Arts	12	18	30	28	12	100	3.10
Commerce	6	12	22	38	22	100	3.58
Management	3	7	18	42	30	100	3.89
3. Assessment Methods							
Arts	15	20	28	25	12	100	2.99
Commerce	7	13	25	35	20	100	3.48
Management	4	8	20	40	28	100	3.80
4. Employability Perception							
Faculty	1	2	3	4	5	Total	Weighted Mean
Arts	18	22	30	20	10	100	2.82
Commerce	6	14	20	38	22	100	3.56
Management	3	7	15	40	35	100	3.97
5. Satisfaction Level							
Faculty	1	2	3	4	5	Total	Weighted Mean
Arts	14	20	32	24	10	100	2.96
Commerce	5	12	25	38	20	100	3.56
Management	3	6	18	43	30	100	3.91

Source: Prepared based on primary survey

Data have been collected using a structured questionnaire based on a five-point Likert scale, originally developed by Rensis Likert, which is widely recognized for measuring attitudes and perceptions in social science research. The questionnaire is designed to capture multiple dimensions related to OBE, including students' awareness of outcome-based learning, their preference for outcome-oriented

courses, perceptions regarding employability, and overall satisfaction with the learning experience.

For data analysis, both descriptive and inferential statistical techniques are applied. Measures such as mean and standard deviation are used to summarize the data, while inferential tools including chi-square tests, analysis of variance (ANOVA), and regression analysis are employed to examine relationships, test hypotheses, and identify significant differences across faculties. This methodological framework facilitates a systematic and comprehensive assessment of how OBE shapes student behaviour, academic preferences, and decision-making processes.

The results of the weighted mean analysis reveal noticeable variations in the acceptance of Outcome-Based Education (OBE) across different academic streams. Students from Management programmes record the highest weighted mean scores, ranging approximately from 3.8 to 3.97, indicating a strong level of agreement and a favourable perception of OBE practices. This trend suggests that Management education is more effectively aligned with outcome-oriented frameworks, possibly due to its close linkage with professional skills and employability.

In comparison, students from Commerce programmes demonstrate moderately high weighted mean values, generally between 3.48 and 3.60. These scores reflect a reasonably positive attitude toward OBE, although the level of acceptance appears to be still developing. This indicates that while OBE principles have been introduced, there remains scope to strengthen their integration, particularly in terms of teaching strategies and assessment practices.

On the other hand, students from the Arts faculty report relatively lower weighted mean scores, ranging from about 2.82 to 3.10. These findings point to comparatively lower levels of awareness, acceptance, and satisfaction with OBE. The overall pattern highlights a clear disciplinary disparity, suggesting that the implementation of OBE is uneven across faculties. It underscores the need for more focused efforts to enhance awareness, training, and effective adoption of outcome-based practices, especially within the Arts stream.

Table 2: Descriptive Statistics

Faculty	Mean Score	Std. Deviation
Arts	3.1	0.82
Commerce	3.8	0.65
Management	4.2	0.58

Table 2 presents the level of awareness of Outcome-Based Education (OBE) among students from the Arts, Commerce, and Management faculties. The mean values represent the average level of awareness, while the standard deviation indicates the extent of variation in student responses.

The findings show that Management students exhibit the highest level of awareness, with a mean score of 4.2 and a relatively low standard deviation of 0.58, suggesting a high degree of consistency in their responses. Commerce students demonstrate a moderate level of awareness, reflected in a mean score of 3.8, along with a slightly higher variation (0.65), indicating some diversity in perceptions. In contrast, Arts students report the lowest level of awareness, with a mean score of 3.1 and a higher standard deviation of 0.82, which points to greater inconsistency in their understanding of OBE.

In short, the results suggest that awareness of OBE is stronger among professionally oriented disciplines such as Management and Commerce, while it remains comparatively limited in traditional fields like Arts. This disparity highlights the need for more focused awareness initiatives and improved implementation strategies, particularly within the Arts faculty.

Table 3: Preference for Outcome-Based Courses

Faculty	High Preference (%)	Moderate (%)	Low (%)
Arts	35	45	20
Commerce	60	30	10
Management	72	20	8

Table 3 illustrates students' preferences for outcome-based courses across the Arts, Commerce, and Management faculties, classified into high, moderate, and low categories. The distribution of responses reveals distinct patterns across the three streams.

Management students demonstrate the strongest inclination toward outcome-based learning, with 72% indicating a high level of preference, 20% reporting a moderate level, and only 8% expressing low preference. This pattern suggests that most Management students recognize the value of outcome-oriented education, likely due to the programme's emphasis on practical skills, industry exposure, and career readiness.

Commerce students also show a positive orientation toward outcome-based courses. About 60% report a high level of preference, 30% fall into the moderate category, and 10% indicate low preference. While this reflects growing acceptance of OBE within Commerce education, the relatively larger share of students in the moderate category suggests that there is still room to strengthen the integration of outcome-based practices in teaching and assessment.

In contrast, Arts students exhibit comparatively lower preference for outcome-based courses. Only 35% report a high level of preference, while 45% indicate a moderate level and 20% fall into the low category. The higher proportion of moderate and low responses suggests that Arts students are less inclined toward OBE, possibly due to the continued dominance of traditional teaching approaches and the slower incorporation of skill-based and outcome-oriented methods.

Overall, the findings indicate that preference for outcome-based education is highest among Management students, followed by Commerce, and lowest among Arts students. This variation highlights a clear disciplinary gap in the acceptance of OBE and underscores the need for enhanced awareness, curriculum redesign, and greater emphasis on skill development particularly within Arts education to improve student engagement and employability outcomes.

Table 4: Chi-Square Test (OBE Awareness vs Faculty)

Faculty	High Preference (%)	Moderate (%)	Low (%)
Arts	35	45	20
Commerce	60	30	10
Management	72	20	8

The results of the chi-square analysis explore the association between students' preferences for Outcome-Based Education (OBE) classified as high, moderate, and low and their respective faculties (Arts, Commerce, and Management). The observed distribution indicates that Management students report the highest proportion of strong preference (72%), followed by Commerce students (60%), whereas Arts students show a comparatively lower level of preference (35%). As the p-value is less than 0.05, the null hypothesis is rejected and the alternative hypothesis is accepted. This confirms a statistically significant relationship between faculty and students' preference for OBE, suggesting that academic discipline plays a crucial role in shaping attitudes toward outcome-based learning.

In addition, the ANOVA results ($F = 9.62$, $p = 0.000$) further support the presence of significant differences in students' perceptions of OBE across faculties. Since the p-value is below the 0.05 threshold, the corresponding hypothesis is accepted, indicating that perceptions of OBE vary meaningfully among different streams. Students from

Management and Commerce faculties exhibit more favourable perceptions, while those from the Arts faculty demonstrate relatively lower levels of acceptance. These findings reinforce the existence of disciplinary differences in the adoption and effectiveness of OBE, highlighting the need for more targeted strategies to ensure its balanced implementation across all fields of study.

Table 5: ANOVA Results (Perception Differences)

Source	F-value	p-value
Between Groups	9.62	0.000

Table 6: Regression Analysis (OBE & Employability)

Variable	Coefficient (β)	t-value	p-value
OBE Awareness	0.48	6.12	0.000
Course Design	0.35	4.75	0.002
Constant	1.12	—	—

The regression analysis evaluates how key Outcome-Based Education (OBE) factors influence students' perceptions of employability. The findings show that awareness of OBE exerts a strong and positive effect on employability perception ($\beta = 0.48$, $t = 6.12$, $p = 0.000$), indicating statistical significance. This suggests that greater understanding of OBE is associated with improved confidence among students regarding their employment prospects.

In addition, course design also demonstrates a meaningful positive impact ($\beta = 0.35$, $t = 4.75$, $p = 0.002$). This implies that curricula structured around clearly defined outcomes and practical competencies contribute significantly to shaping favourable perceptions of employability.

As both independent variables are statistically significant ($p < 0.05$), the hypothesis is accepted, confirming that OBE-related components play an important role in enhancing students' career readiness. The constant term (1.12) represents the baseline level of employability perception when other influencing factors are held constant.

Overall, the regression results underscore that both awareness of outcome-based learning and the quality of curriculum design are critical determinants of how students perceive their employability.

DISCUSSION

The study indicates that Outcome-Based Education (OBE) is playing a significant role in influencing students' academic preferences and decision-making. There is a clear shift toward skill-oriented learning, as students increasingly prioritize curricula that offer practical exposure and align with career opportunities. This trend reflects a broader movement toward employability-focused education.

Among the different faculties, Commerce and Management programmes appear to have adapted more effectively to OBE. Their stronger connections with industry, access to internships, and professionally structured courses have facilitated smoother integration of outcome-based practices. As a result, students in these streams demonstrate higher acceptance and engagement with OBE.

In contrast, the Arts faculty shows a relatively slower pace of adaptation. However, it is gradually evolving through the inclusion of interdisciplinary perspectives and the introduction of skill-based elective courses, which are beginning to enhance its relevance in the changing educational environment.

Despite these encouraging developments, certain challenges continue to affect the effective implementation of OBE. These include limited faculty training, insufficient awareness among students, and variations in how OBE is applied across departments. Addressing these issues is essential to ensure

more consistent and impactful adoption of outcome-based education across all disciplines.

RESULTS

The results reveal noticeable differences in awareness of Outcome-Based Education (OBE) across academic streams. Students from Management and Commerce faculties demonstrate a higher level of awareness compared to those from the Arts faculty. There is also a clear inclination toward courses that emphasize measurable learning outcomes and practical applicability, reflecting students' growing preference for career-oriented education.

Furthermore, the study establishes that OBE has a positive and statistically significant influence on students' perceptions of employability. It also highlights meaningful variations across faculties, indicating that students' academic backgrounds shape how they perceive and engage with outcome-based learning.

At the same time, the findings suggest that institutional preparedness for implementing OBE is not uniform across departments. This uneven readiness points to the need for more structured and coordinated reforms to ensure effective and consistent adoption of OBE across all disciplines.

CONCLUSION

Outcome-Based Education (OBE), as envisioned under the National Education Policy 2020, marks a significant transition in the approach to higher education. Evidence drawn from SNTD Women's University indicates that OBE contributes to greater student engagement, strengthens perceptions of employability, and plays an important role in shaping enrolment choices.

At the same time, the effectiveness of OBE depends largely on how well it is implemented in practice. Its full potential can only be realized when institutions adopt a systematic approach that ensures consistency across departments. This includes strengthening faculty capabilities through targeted training, establishing reliable and transparent assessment mechanisms, and improving students' understanding of outcome-based learning.

Overall, while OBE offers clear advantages, its long-term success requires sustained institutional commitment and coordinated efforts to embed outcome-oriented practices within the academic system.

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