



THE INFLUENCE OF TEACHERS' KNOWLEDGE, ADAPTABILITY, ATTITUDES, AND SELF-EFFICACY ON OUTCOMES-BASED EDUCATION PRACTICES: A REGRESSION ANALYSIS

Justfer John D. Aguilar

Faculty, University of Southern Mindanao, Philippines

Corresponding Author. Justfer John D. Aguilar

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ABSTRACT

It is widely agreed that factors from the teachers significantly influence the practices of Outcomes-Based Education. As OBE is gaining popularity as a new paradigm of education in most of the higher education institutions subjected a teacher's response to its actual implementation. The study employed descriptive and correlational research design in analyzing the factors and utilized multiple linear regression to analyze its influence on the extent of OBE practices. Results showed that level of knowledge on OBE and the level of adaptability greatly influenced the extent of OBE practices. Teachers who better understand the curriculum are better able to adapt their strategies to meet the needs of diverse students and are equipped with skills relevant to the attainment of student's outcome. Teachers who are willing to try new teaching strategies and adjust their instruction based on student feedback may be more successful in implementing OBE practices than those who are more resistant to change. Significantly, Alignment is a positive predictor of the respondents' perceived extent of OBE practices. The knowledge on the constructive alignment helps teachers to facilitate students' achievement of outcomes and experiences while being certain of the alignment of all learning experiences to the curriculum. Furthermore, attitude towards OBE and the level of self-efficacy showed a great influence in the extent of OBE practices. The certain degree of agreement depicts the recognition of effectiveness of OBE in strengthening education. As teachers viewed OBE to be effective, they see the value of it in their teaching practices. On the other hand, the higher beliefs of teachers in their capacity to teach depicts a strong will to implement OBE into practice. Acceptance, instructional strategies, and classroom management are all positive predictors of the respondents' perceived extents on OBE practices. However, feelings is a negative predictor which mean that even if teachers possess a negative attitude towards OBE, it does not affect their teaching practices following OBE

KEYWORDS: knowledge, outcomes-based education, adaptability, attitudes, self- efficacy, practice

INTRODUCTION

It is widely agreed that factors from the teachers significantly influence the practices of Outcomes-Based Education. As OBE is gaining popularity as a new paradigm of education in most of the higher education institutions subjected a teacher's response to its actual implementation. It is believed that teacher's role in any curricular reform is crucial. Hence, their knowledge, adaptability, attitudes, and self-efficacy may influence the practices relevant to the implementation of this curriculum. Teacher's response to the ever- changing education is dependent on his or her understanding of the curriculum, their flexibility to adopt to changes, their positive views and their capacity to teach amidst the changing conditions.

Philippine higher education institutions were mandated by CHED to respond to the aims of raising educational standards in producing marketable graduates that can work elsewhere in the ASEAN region through the implementation of Outcomes-Based Education policy to enhance quality assurance. This policy is envisioned to align the practices of the higher education institution to well -defined mission, vision, and outcomes. Thus, requires the Institution to shift their approaches from teacher centered to a more student-centered

education.

Considerable research proves the importance of teacher's role in the implementation of outcomes-based education (Killen, 2000; Butler, 2004; De Guzman et.al, 2017). Literature suggest that the success of OBE depends largely on "how" and "how much" it was valued by educators in their teaching practices. Thus, the way educators understand, interpret, viewed, and respond to it makes up a good implementation. Though outcome-based education has been observed to be successful in other countries and even in the Philippines, the question that lingers this research is how it was being sustained. A qualitative inquiry of Dagdag and Cardona (2018) among 22 Higher Education Institutions in the Province of Isabela revealed that although most of the faculty members are knowledgeable in OBE, ideal practices were not implemented. Hence, suggested much effort is needed to sustain the implementation.

Teacher's knowledge on OBE is one of the indicators of sustainability. Hence, their positive reception through gaining awareness and understanding of the curriculum indicates a greater extent of practice. As mentioned by Laguador and Dotong (2014), a higher level of understanding, provides a



greater possibility to contribute to the realization of the OBE curriculum. This only means that it is crucial for an effective delivery of learning experiences that are aligned with the students' achievable outcomes. Teachers who are knowledgeable of OBE can design assessments that accurately measure the learning outcomes, which helps to ensure that students are meeting the expected competencies and skills. Moreover, in any changes, it is important that teachers had an ability to conform and adjust to an inherently changing circumstance. This indicates that their adaptability to changes is pivotal. Loughland and Alonzo (2019) asserted that more adaptable teachers tend to adjust the teaching to conform with the curriculum. This supports the assertion of Collie and Martin (2016) that the work of teachers implicates any changes and reforms. Hence, they are expected to respond effectively and proactively manage the adjustments to translate these into instructional practices.

Consequently, attitudes towards OBE also play a critical role in the successful practice of this curriculum. Teachers who have positive attitudes towards OBE are more likely to implement the approach effectively, as they are motivated to achieve the desired outcomes. Conversely, negative attitudes towards OBE may lead to resistance or lack of motivation, which can hinder the implementation of the approach. Alimyar (2020) emphasized that attitudes are considered factors that impacted the lecturers to implement OBE in classrooms. This is supported by the results of the study of Ortega and Dela Cruz (2016) that demonstrated the positive attitude of faculty towards OBE implementation. Literature suggest that teachers view on the curriculum replicates a certain degree of agreement to a curricular reform. Thus, proves that attitudes may impede or support the practices of the curriculum. On the other hand, self-efficacy, is an essential factor that influences the extent of OBE practices. Teacher who possesses a high degree of self-efficacy tends to persist challenges and setbacks in the implementation of OBE. According to Klassen et al. (2010) teachers that demonstrate high self-efficacy possessed effective teaching strategies and mechanism to cope successfully with tasks, obligations and challenges related to his or her role in the school.

Although research had been conducted to determine the extent of OBE practices and implementation, variations in the findings call for this research to be pursued. As OBE becomes the mandated curriculum, it would be imperative to examine how factors from the teachers influence the OBE practices. Thus, this research study will provide a comprehensive grasp on the implementation of OBE in the perspective of the key players of curriculum, the teachers. Specifically, this study tried to:

1. Find out the influence of the extent of knowledge and extent of adaptability on OBE of the respondents on the perceived extent of OBE practices; and
2. Examine the influence of the attitudes towards OBE and self-efficacy in teaching of the respondents on the perceived extent of OBE practices.

METHODOLOGY

This study employed a descriptive and correlational research design. The methods were utilized to collect data using a research survey questionnaire where quantitative analysis would be used to examine the influence of extent of knowledge, adaptability, attitudes, and self-efficacy to the extent of OBE practices. To further analyze the data in this study, this study employed a multiple Linear Regression to determine if the teacher's level of knowledge on OBE, adaptability, attitudes towards OBE and self-efficacy can predict the extent of OBE Practices. Multiple Linear Regression was used when two or more independent variables are examined if it can predict the dependent variable. This will allow establishing the causal relationship among variables.

This study was conducted in University of Southern Mindanao-Kidapawan City Campus, an extension campus of the University of Southern Mindanao Located at the Municipality of Kabacan, Cotabato. The campus is an external campus of USM that has three colleges namely, College of Education, Arts and Sciences, College of Engineering and College of Technology. Moreover, the 104 faculty members were carried out as respondents through random sampling. They were faculty members that comprise the three colleges of the campus. The researcher obtained authorization and approval from the President of the University where the respondents are employed. Likewise, the researcher submitted a letter to the chancellor for the conduct of the study. After securing a letter, the researcher scheduled the dates for the survey administration. The administration of the instruments was conducted through Google forms sent to their individual emails. Moreover, permission from the respondents were obtained before the conduct of the study.

The researcher utilized survey questionnaire in gathering the data. The first part of the questionnaire is adopted from the study of Nguyen and Pham (2021) with Cronbach Alpha value of $\alpha = 0.85$. The questionnaire consists of 20 items that would inquire or ascertain the level of understanding on OBE. The second part of the questionnaire determined the extent of adaptability of the respondents. The questionnaire is consisted of 25 items with five different dimensions: (1) Active Learning, (2) Creative Application, (3) Emotional Management, (4) Situational Adaptation and (5) Opinion Flexibility. The instrument was adopted from the instrument developed by Samale (2016) based on the Measure of Adaptive Performance (MAP) instrument by Lillard et al. (2012) and the Individual Adaptability Theory (I-ADAPT) instrument by Ployhart and Bliese (2006). The instrument used contains a reliability with the Alpha (Cronbach Alpha value) of $\alpha = 0.87$. The third part of the questionnaire was adopted from Ortega and Ortega-Delacruz (2016) that determined the attitudes of the respondents toward OBE. However, few modifications were made to suit to the needs of the study. The questionnaire is consisted of 20 items that would measure their viewpoint and degree of agreement towards the implementation of OBE based on beliefs, feelings, readiness, and acceptance. The fourth part of the questionnaire inquired the self-efficacy of faculty. The instrument was adopted from Tschannen-Moran and Hoy (2001). It is consisted of 12 items to measure their



beliefs on their ability towards teaching. Specific items are based on the dimensions of student engagement (item 1-4), instructional strategies (5-9) and Classroom Management (10-12). Last part of the questionnaire was aimed to determine the extent OBE practices in the campus. The instrument was adopted from Bansig and Iringan (2019) for practices in Instructional Design and Tungpan and Anatalan (2021) with for items on Instructional Assessment and Instructional Strategies. This is consisted of 20 items divided into three categories namely instructional design, instructional strategies and instructional activities.

RESULTS AND DISCUSSIONS

The Influence of the Extent of Knowledge and Extent of Adaptability on OBE of the Respondents on the Perceived Extent of OBE Practices

Table 1 shows the result of multiple linear regression analysis that was performed to determine the influence of the extent of knowledge and extent of adaptability on OBE of the

respondents on the perceived extent of OBE practices. It is shown in Table 1 that the model is significant, $R^2 = 0.726$, Adjusted $R^2 = 0.703$, $F = 31.45$, $p < 0.01$, which indicates that teacher respondents who perceive great extent on OBE practices have higher extent of knowledge and adaptability. This implies that teachers who better understand the curriculum are better able to adapt their strategies to meet the needs of diverse students and are equipped with skills relevant to the attainment of student's outcome. Further, it implies that because of their higher level of understanding they can better contribute to the realization of OBE curriculum. This could be a result of the trainings and seminars conducted by the University to ensure that faculty members are fully aware of this new paradigm. This corroborates with the claim of Tsai et.al. (2014) that when OBE is clear to the teachers who serve as fundamental implementers, it would result in a better and purposeful implementation. Additionally, teachers who are more adaptable may be better able to implement OBE practices in their classrooms, as OBE requires teachers to be flexible and responsive to the needs of their students.

Table 1. Influence of the Extent of Knowledge and Extent of Adaptability on OBE of the Respondents on the Perceived Extent of OBE Practices

MODEL	UNSTANDARDIZED COEFFICIENTS		STANDARDIZED COEFFICIENTS	t	Sig
	B	Std. Error	Beta		
1 (Constant)	.946	.480			.052
Advantages	.12	.049	.018	1.972	.802
Components	-.109	.083	-.087	.252	.189
Alignment	.473	.043	.691	-1.323	.000
Active Learning	.082	.047	.113	11.029	.087
Situational Adaptation	.004	.035	.007	1.728	.908
Emotional Management	-0.47	.037	-.073	.116	.209
Creative Application	.265	.070	.240	-1.265	.000
Opinion Flexibility	-.21	0.70	-.016	-.296	.768

$R^2 = 0.726$, Adj $R^2 = 0.703$, $F = 31.45$, $p < 0.01$

Teachers who are willing to try new teaching strategies and adjust their instruction based on student feedback may be more successful in implementing OBE practices than those who are more resistant to change. The fact that OBE is a 21st century approach to education subjected the teacher flexibility to be innovative and creative to suit the needs of the learners. Iloanya (2019) asserted that the implementation of OBE as new curriculum requires teachers to be prepared for innovation of their teaching. This is similar with Donina (2021) whose findings illustrate the adaptive practices that teachers do as they interact with changes. Teachers who are adaptable are more creative in their teaching and more adaptable to conform with the changes. The coefficient of determination $R^2 = 0.726$ means that about 72.60% of the variance in the teacher respondent's perceived extent of OBE practices was explained or accounted for by respondents' level of knowledge and level of adaptability on OBE.

Alignment is a positive predictor of the respondents' perceived extent of OBE practices. This means that knowledge on the constructive alignment helps teachers to facilitate students' achievement of outcomes and experiences while being certain

of the alignment of all learning experiences to the curriculum. McCann (2016) asserted that the knowledge of teachers on the appropriate alignment of teaching, learning and assessment better provides a structure to facilitate deeper the learning of the students. This also conforms with Mimirinis (2007) that understanding of faculty on constructive alignment creates a positive implication to the quality learning in Higher Education. This is similar with the claim of Jaiswal (2019) that the knowledge on constructive alignment foster better learning process in boosting student's accomplishment of intended outcomes.

The Influence of the Attitudes towards OBE and Extent of Self-efficacy of the Respondents on the Perceived Extent of OBE Practices

Table 2 shows that multiple linear regression analysis was performed to examine the influence of the attitudes towards OBE and self-efficacy in teaching of the respondents on the perceived extent of OBE practices. Results show that the model is significant, $R^2 = 0.855$, Adjusted $R^2 = 0.703$, $F = 80.74$, $p < 0.01$, which indicates that teacher respondents who perceive great extent on OBE practices awfully agree towards OBE and



efficacious in teaching. This implies that teacher's positive attitude towards OBE and their higher capacity in teaching influences how teachers demonstrated OBE in their teaching practices. It further implies that the certain degree of agreement depicts the recognition of effectiveness of OBE in strengthening education. As teachers viewed OBE to be effective, they see the value of it in their teaching practices. This conforms with Alimyar (2020) whose finding emphasized that attitudes influence the lecturers to implement OBE in classrooms. This is supported by Mercado and Lagto (2018) who asserted that an attitude of agreement with the policy, guidelines and standards foster greater extent of practices. On

the other hand, the higher beliefs of teachers in their capacity to teach depicts a strong will to implement OBE into practice. Ross et.al (2001) asserted that teachers with high self-efficacy can produce superior achievement, as they have the tendency to translate their behavior into instructional practices. This corroborated with the claim of Richards (2008) that teacher's high belief can posit better classroom practices. Significantly, according to Klassen et.al (2010) teachers that demonstrate high self-efficacy possessed effective teaching strategies and mechanism to cope successfully with tasks, obligations and challenges related to his or her role in the school.

Table 1. Influence of the Attitudes towards OBE and Extent of Self-efficacy of the Respondents on the Perceived Extent of OBE Practices

MODEL	UNSTANDARDIZED COEFFICIENTS		STANDARDIZED COEFFICIENTS	t	Sig
	B	Std. Error	Beta		
1 (Constant)	-.832	.523		-1.591	.115
Belief	.37	.051	.043	.716	.476
Feeling	-.159	.159	-.198	-3.585	.001
Readiness	.169	.169	.064	1.298	.197
Acceptance	.436	.436	.225	4.137	.000
Student Engagement	.040	.040	.038	.490	.626
Instructional Strategies	-0.495	.495	.686	8.002	.000
Classroom Management	.148	.148	.216	3.115	.002

$$R^2 = 0.855, \text{Adj } R^2 = 0.703, F = 80.74, p < 0.01$$

The coefficient of determination $R^2 = 0.855$ means that about 85.50% of the variance in the teacher respondent's perceived extent of OBE practices was explained or accounted for by respondents to their attitude and self-efficacy on OBE. Acceptance, instructional strategies, and classroom management are all positive predictors of the respondents' perceived extents on OBE practices. This indicates that attitude of teachers toward OBE is generally derived from their level of acceptance to the curriculum. This further denotes that teacher who fully accepted the curriculum as a new guiding principle in education, fosters a better engagement in teaching practices aligned with OBE. The fact that OBE is a mandated curriculum subjected the teacher's response of acceptance to the curriculum. This conforms to the study of Peskova et al (2019) whose finding yields a similar result that acceptance influences the way curriculum is fostered in classrooms. This coincides with Duan (2019) that many universities across China demonstrated a higher acceptance and recognition on OBE and this is reflected on their innovative and efficient ways of teaching. Significantly, self-efficacy in instructional strategies and classroom management influence the extent of OBE Practice. This implies that teacher's confidence to utilize instructional strategies and classroom management are more likely to believe in their ability to effectively implement OBE practices in teaching. According to Catalano et.al (2019) teachers with higher self-efficacy tend to use innovative and engaging strategies to align with the curriculum being implemented. This is similar to the claim of Alvarez-Nunez

(2012) that a strong predictor of implementation is teacher's self-efficacy. Teachers with high self-efficacy tend to put much effort into their teaching, established a desired goal and gained enthusiasm in work.

On the contrary, feeling is a negative predictor to the extent of OBE practices which means that feeling does not influence the extent of OBE practices. This contradicts with Giessen-Hood (2014) whose finding revealed that feelings to OBE reflects the principles that are valued by teachers and transmitted to their teaching practices. However, findings coincide with Troudi and Alwan (2010) among teachers of UAE who experienced curricular changes. Their findings revealed that teachers feeling do not influence their teaching practices because feelings will just evolve through time and as they become more attached with the curriculum, they became more familiar with it.

CONCLUSION

Based on the multiple linear regression analysis conducted, it is evident that the extent of knowledge and adaptability of teachers significantly influenced their perceived extent of OBE practices. Teachers who possess a higher extent of knowledge and adaptability on OBE practices are better equipped to meet the diverse needs of their students and implement OBE effectively in their classrooms. The findings also suggest that constructive alignment is a positive predictor of the perceived extent of OBE practices, which implies that teachers who understand the alignment of teaching, learning, and assessment



are more likely to facilitate their students' achievement of intended outcomes. These findings underscore the importance of training and development programs for teachers to enhance their knowledge and skills related to OBE and constructive alignment.

Moreover, the results of the analysis concluded that attitudes and self-efficacy demonstrated by the teachers significantly influence the extent of OBE practices. This suggests that teacher's recognition of the effectiveness of OBE and their belief in their teaching capacity are important factors in promoting OBE practices. Consequently, the study found that acceptance, instructional strategies, and classroom management are positive predictors of the respondents' perceived extent of OBE practices. This indicates that teacher's acceptance of the curriculum, utilization of effective teaching strategies, and classroom management skills are crucial in fostering a better engagement in teaching practices aligned with OBE. On the other hand, feelings were found to be a negative predictor of the extent of OBE practices. This indicates that even if teachers possess a negative attitude toward OBE, it does not affect their practices in OBE.

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