Original Paper

Enhancing the Delivery of the Teacher Education Courses through the Development of OBE-Based Teaching Guides

Agripina B. Maribbay^{1*}

¹ St. Paul University Philippines (e.g., Graduate School, St. Paul University Philippines), Tuguegarao City, Philippines

^{*} Agripina B. Maribbay, St. Paul University Philippines (e.g., Graduate School, St. Paul University Philippines), Tuguegarao City, Philippines

Received: November 11, 2020 Accepted: November 17, 2020 Online Published: December 19, 2020 doi:10.22158/wjer.v8n1p36 URL: http://dx.doi.org/10.22158/wjer.v8n1p36

Abstract

This project aimed to develop Outcomes-Based Education (OBE) teaching guides to enhance the delivery of courses in the teacher education programs. This paper specifically provides the result of the participants' assessment and problems encountered in the implementation of the OBE-based approach in teaching. The 200 study participants covered faculty and administrators of thirty (30) selected Teacher Education Institutions in Region 02. Results reveal that the OBE-based approach was implemented to a great extent along Institutional Mission, moderate extent in terms of outcomes and low extent along areas such as curriculum, instructional delivery, assessment, and reporting. Participants' inadequacy of knowledge and skills, teaching resources, and time were among the problems encountered by the participants in the implementation of the OBE-approach in the teacher education curriculum. These results serve as a guide for the development of OBE-based teaching guides to enhance the implementation of the curriculum. The development of the teaching guides was based on a set of frameworks. The Project Proposal Framework particularly details the processes undertaken in the development of the teaching guides while the SPUP-OBE Framework provides the teaching guides' content. Furthermore, it presents the specific methods for the teachers' training on the principles and standards of OBE, the development of OBE-based teaching guides, the logical framework of the proposed teaching guide, the monitoring and evaluation plan, and the dissemination plan. This method includes the design, scope, tools, and analytical procedures for the specific processes involved.

Keywords

Outcomes-Based Education (OBE), OBE framework, teacher education, teacher training

1. Introduction

Outcomes-Based Education (OBE) and policies had evolved during the 1990s. Since then, educators worldwide have been increasingly focusing their efforts on what is being called "outcomes," "competencies," or "standards" (Lam, 2009).

Educators play a major role in the implementation of OBE. Hence, they must know what is required of them in an OBE classroom. According to Ramoroka (2007), the success of outcomes-based education depends on how well it is understood. Those involved in teaching, training, and human resources development need to understand how traditional education and training approaches must be capitalized on and enriched to effect outcomes-based learning.

By carefully and critically projecting OBE, educators could understand what is expected of them in the classroom. They will then know what to do to help learners achieve these outcomes. According to Spady (1993), what and whether learners learn is more important than when and how they learn.

In the research project conducted at SPUP, with the deans, associate deans, program coordinators, faculty, as well as graduate students of the university who teach in other Teacher Education Institutions (TEIs) in the region as participants, the level of participants' understanding of OBE is only fairly satisfactory; most of these faculty members claim that they know what OBE entails, but they experience problems with its implementation, particularly in the preparation of teaching materials and other learning resources as guides to OBE-based teaching. It was found out further that there was a gap between what they knew and what they did in the classroom. As indicated in the project, about 60% of the participants are not prepared or competent in implementing OBE primarily because they do not have adequate resources/materials that will serve as guide in implementing OBE in the classroom.

Potenza and Monyokolo, as cited in Jensen and Christie (1999), argued that the success of any new program/curriculum depends on the training and support that teachers receive. Hence, if teachers acquire comprehensive knowledge, understanding, and OBE applications, they will be equipped with the necessary skills to facilitate the effective implementation of OBE in the classroom. This means then that teachers have to be effectively trained to be able to understand meaningfully OBE concepts, principles, and standards as well as its challenges, how to utilize a variety of methods/strategies, and to prepare teacher support materials to facilitate the delivery of the lessons and to assess the extent to which outcomes have been achieved.

For these reasons, this study, "Development of OBE-based Teaching Guides for Enhancing the Delivery of the Teacher Education Courses" was conceived. These teaching resources can assist the Commission on Higher Education and Teacher Education Institutions (TEIs) in the implementation of the OBE-based teaching approach.

1.1 Research Framework

Outcome-based education is a method of teaching that focuses on what students can do after they are taught or at the end of the period of schooling and what qualities should they possess when they graduate from the school or program (Lawson, 2007).

All curriculum and teaching decisions are made based on how best to facilitate the desired outcomes. This leads to a planning process that is different from traditional educational planning. The desired outcome is first identified, and the curriculum is created to support the intended outcome. "We work backward from those primary objectives. "This is what we want to achieve, so what do we need to do to reach those objectives?" "What sort of people do we expect our graduates to be?" Hence, the focus is on outcomes. Curriculum planners could then proceed to plan the school curriculum or the program or project by working backward from those primary objectives.

Spady (1994) sees OBE as encompassing all students and that all can be successful in achieving the outcomes established by the educational system. He places major responsibility for the achievement of outcomes on the school and teachers: schools are expected to fulfill their obligation of equipping all students with the competence and qualities needed to face the challenges beyond the schoolhouse door.

OBE has four simple principles. The first principle, sometimes referred to as clarity of focus, emphasizes that the educational system should be organized so that teachers and learners can focus, consistently, systematically, and creatively on the important outcomes that learners are to achieve. To be important, outcomes should require "high-quality, culminating demonstrations of significant learning in context" (Spady, 1994, p. 18). The second principle is called designing back, and it is inextricably linked to the first principle. It means that the starting point for curriculum design must be a clear definition of the significant learning that students are to achieve. Once this required learning has been defined, important instructional decisions can be made by tracing back from this `desired end-result' and identifying enabling outcomes that will assist learners to achieve the broader long-term outcomes. This does not mean that curriculum design or implementation should involve simple linear processes, but it does mean that there should be direct and explicit links between all planning, teaching, and assessment decisions and the significant outcomes that students are ultimately to achieve. The third principle of OBE affirms that teachers should have high expectations for all students; they should expect all students to achieve significant outcomes for high standards.

From this perspective, depth of understanding and intellectual rigor is not reserved for a few learners; they are expected of all learners. This provides a link to the fourth principle that teachers must strive to provide expanded learning opportunities for all learners in recognition of the fact that not all learners can learn the same things in the same way or at the same time.

Based on these principles, SPUP has outlined an OBE framework that will be adopted and implemented throughout this project. The framework is described in terms of the following diagrams.



Figure 1. SPUP OBE-Framework

The development of the OBE teaching guides requires the involvement of varied stakeholders such as the faculty, students, alumni, industry practitioners/employers as their inputs and feedback are necessary for the identification and formulation of learning outcomes/competencies. A thorough review of the CHED Memorandum Orders (CMOs) of the Teacher Education program, the requirements and standards of regulatory, accrediting, and certifying bodies would also be conducted.

For proper alignment of the learning outcomes with the institution's vision and mission, a review of the key concepts of the vision and mission, the program's educational objectives, program outcomes, and course outcomes would be conducted. Hence, the first component of the Teaching Guide consists of the different matrices showing the mapping/alignment of the institution's vision and mission with the PEOs, POs, course outcomes and the alignment among these objectives/outcomes as well as with the specific learning outcomes for the different topics in every course.

The second component of the OBE teaching guide consists of the Learning Plan. The Learning Plan matrix consists of the Intended Learning Outcomes for every topic/lesson, course content/

corresponding topics, the teaching methods/strategies involving the 21st-century teaching-learning methodologies, the specific teaching-learning activities to achieve the desired learning outcomes, the assessment tasks congruent to the desired outcomes together with the appropriate assessment tools that would be used to assess the extent of achievement of the learning outcomes, and the learning resources that would be utilized for the effective delivery of the course/lesson. Updated references would be included in the teaching guide. A validation/verification tool would be attached to the teaching guide to ensure the content validity of the teaching guide. All rubric-based assessment tools would be appended in the teaching guides.

By the end of the year, the university, through the VP Academics Office would conduct an assessment on the utilization of the teaching guides in terms of its effectiveness in enhancing students' competencies. Program and course assessments would also be conducted periodically to measure the extent of implementation of the learning plan and the attainment of the desired learning outcomes as indicated in the OBE-based teaching guides. Based on the results of the assessment, interventions, or enhancements would be designed and implemented and would be integrated into the teaching guides.

1.2 Statement of the Problem

The study aimed at developing Outcomes-Based Education (OBE) Teaching Guides for Teacher Education courses to facilitate the implementation of OBE in the Teacher Education Institutions.

Specifically, the study aimed to answer the following sub-problems:

1) What is the participants' assessment of the implementation of the OBE- approach in their respective schools?

2) What are the problems encountered by the participants concerning the implementation of the OBE approach?

3) What teaching-learning resources can be developed to enhance the delivery of teacher education courses in the new curriculum?

2. Method

2.1 Research Design

The study utilized the descriptive research design in obtaining relevant data for the conceptualization of the research project. The research and development type of research was used as this is focused on the development of the OBE-Teaching Guides for teacher education courses.

The descriptive research design is an appropriate choice as this study aimed at providing and documenting an accurate account of the existing practices as regards the implementation of outcomes-based education in Teacher Education Institutions in Region 02. Moreover, the study identifies problems/issues and provides an intervention to the existing problems and challenges. Through the descriptive design, description of the current situation leads to an interpretation of the findings and the development of an alternative solution in terms of the development and validation of outcomes-based teaching guides for Teacher Education courses.

2.2 Participants of the Study

A random sample of the deans, associate deans, program coordinators, faculty, and graduate school students of selected Teacher Education Institutions in Region 02 were the participants of the study. There were 200 participants in the study who were selected from the thirty teacher education institutions in Region 02.

2.3 Instrumentation

A survey questionnaire was used to assess the extent of implementation of the OBE in the different TEIs in the region. These tools particularly assess the OBE implementation in terms of institution mission, outcomes, curriculum, instructional delivery, assessment, and reporting. An interview guide was used to obtain information on the problems encountered by the participants in the implementation of the OBE approach.

The development of the enhanced OBE-teaching guides was based on the SPUP OBE-Framework and the results of the assessment of the OBE implementation.

2.4 Data Gathering Procedure

The researcher sought permission from the heads of the different Teacher Education Institutions (TEIs) through the endorsement of the Commission on Higher Education for the conduct of the study. Coordination with the school heads regarding the administration of the questionnaires was set. Data enumerators were sent to the different participating TEIs for the administration of the survey questionnaires.

2.5 Data Analysis Tools

The mean was used to analyze the participants' assessment of the implementation of the OBE. A five-point Likert scale was used to further interpret the means. The problems encountered by the participants were organized through thematic analysis.

3. Results and Discussion

I. Participants' Assessment of the Implementation of the OBE

Table 1. Assessment Results on the Extent of Implementation of OBE

Standards	Mean	DI	Extent
A. Institutional Mission			
1. The institution has well-defined vision-mission statement.	3.64	SA	GE
2. The institution's vision-mission statement reflects a commitment to	3.54	SA	GE
enable all students to be successful.			
3. All the members of the institutional community are committed to the	3.42	SA	GE
established vision-mission statement.			
4. The institution continuously strives to establish a climate that promotes a	3.48	SA	GE

_

high level of performance of students, faculty and other personnel.			
Category Mean	3.52	SA	GE
B. Outcomes			
1. The institution/school has clearly defined institutional outcomes	3.58	SA	GE
2. The institution/school implements the institutional outcomes that	3.42	SA	GE
students are required to demonstrate.			
3. Stakeholders are involved in the formulation, monitoring and review of	2.32	D	LE
the PEOs and POs.			
Category Mean	3.11	А	ME
C. Curriculum			
1. The school/college has clearly defined Program Educational Objectives	2.72	А	ME
(PEO) and Program Outcomes (PO) for each program of discipline that are			
aligned with the institutional outcomes.			
2. The PEOs are appropriately mapped with the institutional mission	2.46	D	LE
statement			
3. The POs are appropriately mapped with the PEOs.	2.34	D	LE
4. Course outcomes that support the program outcomes are clearly	2.62	А	ME
formulated.			
5. Course content/topics and intended learning outcomes are appropriately	2.42	D	LE
mapped with the course learning outcomes			
6. Instructional resources/learning materials are appropriately selected and	2.34	D	LE
adequately prepared based on the identified learning outcomes.			
7. Program and course outcomes are regularly reviewed to ensure their	2.38	D	LE
relevance.			
8. Curricula of studies are periodically and systematically reviewed to	2.42	D	LE
ensure consistency of the course and program outcomes			
Category Mean	2.46	D	LE
D. Instructional Delivery			
1. Pedagogical tools for course delivery are well-defined and appropriately	2.48	D	LE
chosen.			
2. Students are provided with various opportunities and effective	2.24	D	LE
21st-century teaching-learning strategies to facilitate mastery of essential			
competencies			
3. Remedial instruction is provided for students who do not master	2.32	D	LE
essential competencies			
4. Teachers make every effort to ensure that all students successfully	2.38	D	LE

demonstrate all intended learning, course, and program outcomes.			
5. Teachers assess students by their ability to demonstrate appropriate	2.42	D	LE
outcomes.			
Category Mean	2.37	D	LE
E. Assessment and Reporting			
1. Teachers measure students' performance against the required intended	2.64	А	ME
learning/course outcomes			
2. The teachers develop and utilize performance-based assessment	2.36	D	LE
tools/activities			
3. The teachers utilize alternative/authentic assessment strategies/	2.32	D	LE
tasks/activities to measure student achievement			
4. Students are allowed to engage in new units of instruction when they	2.24	D	LE
have mastered the topics/lessons; enrichment activities are provided for			
these students.			
5. Results of students' performance are communicated timely to them and	2.52	А	ME
their parents.			
Category Mean	2.42	D	LE
Overall Mean	2.90	Α	ME

* SA: Strongly Agree (GE: Great Extent) A: Agree (ME: Moderate Extent) D:Disagree (LE: Little/Limited Extent).

Analysis of the data reveals that the Teacher Education Institutions considered in the study are successful in formulating their vision and mission statements which reflect a commitment to the success of the students, faculty, and support staff. Vision and mission statements, which are associated with the needs and directions of the Institution, are essential for the enhancement of the institution's/shool's performance and effectiveness. The manner in which vision and mission were formulated must be as comprehensive as possible so that school members have a sense of ownership (Modiba, 2001).

With respect to outcomes, schools were more likely to have institutional outcomes, Program Educational Objectivs (PEOs), and Program Outcomes (POs) in place, although the school's stakeholders are less involved in the formulation and review of the PEOs and POs as reflected in the participants' mean response.

As regards the articulated curriculum framework of the degree program, course, and intended learning outcomes, the schools were successful in formulating program educational objectives and program outcomes as well as course outcomes. However, appropriate matching or alignment between or among these outcomes was less evident and that review of the curriculum by the stakeholders and the learning outcomes has been conducted to a limited extent.

Provision of various opportunities for students to demonstrate competency has been implemented only to a limited extent. Moreover, utilization of 21st-century teaching-learning strategies to facilitate mastery of essential competencies has been less evident. Generally, the implementation of the system of instructional delivery was rated to a little extent. The 21st century requires complex thinking, learning, and communication skills, and all are more demanding to teach and learn than rote skills. Learning 21st-century skills requires 21st-century teaching (Saavedra & Opfer, 2012). Thus, the results imply emphasis on the integration of the 21st century skills in the teaching-learning process.

In terms of assessment and reporting, the data suggest the occasional of use performance-based/authentic and other forms of alternative assessment strategies to measure student achievement for the learning outcomes. The system of assessment, performance standards, and reporting was assessed by the participants as being implemented to a little extent. Performance-based and alternative assessment are integral part of a balanced curriculum and a comprehensive assessment program and must be an essential component in the overall evaluation of student progress. When authentic assessment is embedded in the curriculum, teachers can focus instruction on learning experiences designed to prepare students for the performance task (Luono-Orlando, 2003). Reasonable use of performance assessments depends not only on the design of the assessments themselves, but also on how well the assessment practices are interwoven with the goals of authentic school reform and effective teaching (Darling-Hammond, 1994).

II. Problems/Difficulties Encountered by Teachers in the Implementation of OBE

Table 2. Frequency and Rank Distribution of the Problems Encountered by the Participants on the Implementation of OBE

Problems/Issues	Percentage	Rank
1. Inadequate knowledge and skill in the implementation of OBE	73.45	1
2. Inadequate teaching resources	71.24	2
3. Inadequate time for the teachers to plan and learn new skills and practices	62.62	5
related to OBE		
4. Lack of sustained support and follow-through by administration	68.32	3
5. Lack of technical assistance and other forms of intensive faculty training on	66.48	4
OBE		
6. Fast turnover of teachers	42.62	7
7. Several overlapping demands in school and teaching/work overload	52.48	6
8. Indifference of teachers towards curriculum innovations	38.24	8

The data indicate that among the problems commonly identified by the teacher-participants, inadequate knowledge and skill in the implementation of the OBE ranked first, followed by inadequate teaching

resources, lack of sustained support and follow-through, lack of technical assistance, and other forms of intensive training on OBE, and inadequate time for the teachers to plan and learn new skills and practices related to OBE. Based on these problems/difficulties that were commonly identified by at least 60% of the teacher participants, the Teacher Education Department, being a Center of Excellence in Teacher Education, together with the Graduate School Teacher Education department thought of conducting seminars/workshops to enhance the skills of the TEI teachers in the implementation of OBE and to develop teaching guides as support materials for outcomes-based teaching and learning.

III. Proposed Teaching-Learning Resources to Enhance the Delivery of the Outcomes-Based Teacher-Education Curriculum

3.1 Project Proposal Framework

The researcher went through the following stages in the development of the OBE teaching guides.



Figure 2. Framework for the Project Proposal

Stage 1. Establishing the Need for OBE-based Teaching Guide Development. The results of the needs assessment, as well as the issues and concerns raised by the faculty of Teacher Education Institutions that were obtained from the results on the implementation of outcomes-based education in the Teacher Education Institutions in Cagayan, served as basis for the development of the OBE-based Teaching Guides for the Teacher Education program. Hence, the reason for the conduct of research to evaluate the implementation of OBE in the Teacher Education program, particularly on the provision of instructional support materials.

Stage 2. Review of CMOs and Other Related Literatures/Studies. Based on the project results, a review of CMO No. 46, series 2012, CMO for the Teacher Education Programs, and other related literatures

and studies on the development of instructional support materials was conducted by the Teaching Guide developers. The results of the review served as inputs for designing the teaching guides.

Stage 3. Designing and Writing Teaching Guides. The teaching guide developers explored all possible information resources to enhance their knowledge and skills in the development of the teaching guides. Consultations with experts of the different professional education courses as well as discipline experts are essential as these would contribute to the enrichment and validity of the contents of the teaching guides in the professional education and content/major courses. After finalizing the design of the OBE-based teaching guides, the developers/writers would have to agree on their respective roles and assigned tasks as well as the mechanics of writing. Writing of the teaching guides would be done by groups and/or individually. The first draft of the completed teaching guides would be presented and reviewed by the experts' identified panel for professional education, content, and major courses. The experts' recommendations would then be incorporated before the printing of the second draft.

Stage 4. Tryout of Sample Topics/Lessons (Validation) and Refinements. A tryout of sample topics/lessons would be conducted with Teacher Education students in some professional/content/major courses to further validate the content of the teaching guides in terms of the Teaching-Learning Activities (TLA) and Assessment Task (AT) and to assess the extent of achievement of the intended learning outcomes. Findings and recommendations from the tryout would be incorporated in the third draft of the teaching guide.

Stage 5. Final Review/Editing/Evaluation. Further revisions/refinements would be done on the teaching guides, and copies of these revised teaching guides would be forwarded to the project team lead and panel of experts/ consultants for their final review/evaluation. Further refinements and editing would be done on the teaching guides based on the panel's and consultants' recommendations.

Stage 6. Production of the Teaching Guides. The teaching guides would be finalized and printed out, and soft-bound copies would be produced for the Teacher Education heads, teachers/end-users, and other stakeholders.

Stage 7. Dissemination of Validated Teaching Guides. Dissemination of the validated materials would be done through seminars/workshops, teaching demonstrations, and/or meetings. The OBE-based Teaching Guides would be implemented/utilized starting the first semester of AY 2018-2019.

Stage 8. Monitoring and Evaluation. The implementation of the OBE-based teaching guides would be monitored periodically by the Teacher Education Dean, Associate Dean/Program Coordinator, discipline experts using a rubric-based monitoring tool developed by the teaching guide developers. Evaluation of the implementation of the teaching guides would be conducted through the use of survey questionnaires, rubric-based evaluation tools, as well as through qualitative methods.

3.2 Logical Framework of Proposed Teaching Guide

Figure 2 presents the logical framework with which the development of the teaching guides was based.



Figure 3. Logical Framework on the Development of the Teaching Guides

Input. These are the resources (financial, physical, etc.) that would be utilized for the production or operation of the program such as budget, equipment, or buildings. This includes the degree of access to multimedia facilities, equipment, and internet resources, adequacy of library and information resources, and the adequacy of a budget to financé the materials needed.

Activities. This includes the required production activities that will yield the needed output. Among these activities are as follows: (1) a review of OBE concepts, principles, standards and applications, (2) formulation of PEOs/POs/ Course Outcomes/ ILOs, alignment of vision-mission to PEOs/POs/; PEOs to POs and Course outcomes, (3) preparation of the learning plan, (4) preparation of the teaching guides in the different Teacher Education professional and major courses, (5) evaluation of the teaching guides, (6) try-out of the materials, (7) refinement of the teaching guides.

Outputs. These are products generated from the activities, and they usually take the form of tangible matter that the people/beneficiaries can use. These are the validated teaching guides for the Teacher Education professional and major courses that are content-validated, relevant, useful, and accurate.

Outcomes. The situation which the program aims to bring about. They are measured using demand-side data: access and utilization of outputs, and satisfaction of beneficiaries.

Impact. This refers to the contribution of the research project to the country's overall development agenda. The development of the teaching guide would result in the enhanced implementation of OBE-based teaching and learning.

3.3 Monitoring and Evaluation Plan

The researchers had conceptualized a monitoring scheme to track the status of implementation of the teaching guides and other required outputs systematically, to assess the effectiveness of the teaching guides in terms of the teaching-learning activities, assessment tasks, and the attainment of the desired outcomes; and to improve current management and utilization of the teaching guides to achieve desired results. The following are the methods for the monitoring and evaluation plan:

Design. Monitoring and evaluation entail all the indicators, tools, and processes that will be used to measure the extent to which the project has been implemented according to plan and the extent to which the project has achieved the desired results. Monitoring and evaluation of the development and implementation of the OBE-based teaching guides will be conducted periodically (semestral and year-end evaluation) and will involve the Dean of the Teacher Education Institution, Associate Dean/Program Coordinator, discipline experts, identified faculty and students, and monitoring and evaluation, team.

Qualitative/individual/group-based methods. Focus group discussions, individual/group interviews, class observations, and teaching demonstrations will be conducted to determine the status of implementation of all components of the teaching guide, the opportunities for improvement, and to address issues and concerns as regards the implementation of the teaching-learning activities and assessment tasks.

Quantitative methods. Rubric-based monitoring tools and survey questionnaires will be developed to assess the effectiveness of the teaching guides concerning the implementation of the teaching-learning activities, assessment tasks/tools, the accomplishment of desired targets, and attainment of desired learning outcomes.

The scope of the monitoring and evaluation plan includes the following:

1) Implementation of teaching guides in all professional, content and major courses will be monitored and evaluated;

2) Classes will be randomly selected for the conduct of class observations by the monitoring team;

3) Evaluation by a random sample of students taken from each class will be conducted about the skills/competencies they have acquired as well as the extent to which the teacher has implemented the teaching guide;

4) All faculty members implementing the teaching guides will be considered in the evaluation.

The tools for the monitoring and evaluation would be the rubrics, survey questionnaire, assessment instruments, individual/group interview guides, observation guides, reflective journals, teaching demonstration evaluation rubric.

3.4 Sustainability Plan

For the sustainability of the utilization of the teaching guides, the following would be undertaken.

1) Periodic review and evaluation of the teaching guides.

2) Continual enrichment of the teaching guides

3) Conduct of research on the effectiveness/impact of the teaching guides on teaching and learning.

The concerted efforts of the various stakeholders of the TEIs are needed to sustain the use of the OBE-based teaching guides. TEIs must extend their support for the continuous improvement of instructional materials, document the value of innovations, and the benefit to their institutionalization. Innovations in teaching and learning in higher education are often the result of efforts made by individual faculty and instructional support staff, but when encouraged and supported, can contribute to building institutional capacity (Nworle, 2014).

4. Conclusion and Recommendations

Based on the findings of the study, the following conclusion was drawn:

The development of frameworks based on the participants' assessment of the implementation of the OBE-approach is instrumental in the development and utilization of the teaching guides. In this study, the general project development framework provides a clear direction of the stages in the development

process from the identification of the inputs and the specific actions on the design of the project to the evaluation process. The SPUP OBE Framework serves as a guide for the instructional content, strategies, materials, and assessment tools that are to be included in the teaching guides. The Logical Framework of Proposed Teaching Guide provides a guide for the inputs, activities, outputs, and outcomes for the teaching guides. Moreover, the specific methods that define the design, scope, tools, and analytical procedure provide clarity of the processes involved in teaching guide development, monitoring and evaluation, dissemination and sustainability of the project.

Based on the conclusion, the following recommendations are offered:

1) The teachers may use the different frameworks in designing their OBE lesson plans.

2) The academic unit heads may adopt the monitoring, evaluation, dissemination, and sustainability plan to ensure the integration of the OBE approach in the delivery of instruction.

3) The heads of the different TEIs must provide administrative support for the maximum utilization of the teaching guides.

4) Future researchers may consider evaluating the effectiveness of the frameworks in the implementation of OBE approach in teaching.

References

- Commission on Higher Education. (2012). CMO No. 37, Series of 2012. Policies, Standards and Guidelines in the Establishment of an Outcomes-Based Education (OBE) System in Higher Education Institutions offering Engineering Programs
- *Commission on Higher Education*. (2012). CMO No. 46, Series of 2012. Policy-standard to enhance Quality Assurance (QA) in Philippine higher education through an outcomes-based and typology-based quality assurance.
- Darling-Hammond, L. (1994). Performance-based assessment and educational equity. Harvard Educational Review, 64(1), 5-31. Retrieved from https://www.fig.net/ resources/proceedings https://doi.org/10.17763/haer.64.1.j57n353226536276
- Jansen, J., & Christie, P. (1999). Changing curriculum: Studies on outcomes-based education in South Africa. Juta and Company.
- Lam, S. (2009). An outcome-based approach to teaching, learning, and assessment in Geomatics higher education: The Hong Kong experience. In *Good Educational Practices*. Surveyors Key Role in Accelerated
- Lawson, M., & Askell, H. (2007). Outcomes-based education. Williams Centre for the Analysis of Educational Futures Flinders University. Retrieved from https://www.eduhk.hk/obl/files/pratical_ guide_5.pdf
- Luongo-Orlando, K. (2003). *Authentic assessment: Designing performance-based tasks*. Pembroke Publishers Limited.
- Modiba, S. N. (2001). The importance of vision and mission statements in promoting school

effectiveness in Northern Province schools (Doctoral dissertation, University of Johannesburg).

- Nworie, J. (2014). Developing and Sustaining Instructional and Technological Innovations in Teaching and Learning. *Journal of Applied Learning Technology*, 4(4).
- Saavedra, A. R., & Opfer, V. D. (2012). Learning 21st-century skills requires 21st-century teaching. *Phi* Delta Kappan, 94(2), 8-13. https://doi.org/10.1177/003172171209400203

Spady, W. (1993). Outcome-based education. Australian Curriculum Studies Association.

Spady, W. G. (1994). Outcome-Based Education: Critical Issues and Answers. American Association of School Administrators, 1801 North Moore Street, Arlington, VA 22209.