



Implementation of Outcomes Based Education in State Universities in Region

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Abstract – The adoption of the Outcomes-Based Education (OBE) by the Commission on Higher Education (CHED) is a response to the need and demand for standards and equivalency, and like any other implemented policy, such necessitates further research by practitioners, as in this study. Using descriptive design and involving selected higher education institutions in Region I, findings revealed that majority of the respondents are compliant with OBE in terms of the minimum requirements set by the CHED; highly compliant in terms of level of alignment and consistency of learning environment such as libraries, classroom and laboratories; high level of achievement in terms of quality of teaching and learning; high level of achievement in terms of governance and management. The result showed high remarks in terms of quality assurance in the implementation of the OBE.

Keywords – Outcome-Based Education, Region I, Philippines

INTRODUCTION

Education plays a vital role in shaping the citizens future to become a productive member of the society. Education provides everyone with a theoretical and practical comprehension of different academic discipline. It builds competence as well as positive values and attitudes by developing the skills and abilities of students to have a strong nation and to become globally competitive, citizens should be competent to become more productive. However one of the major challenges is the international movement of the students from Asia to western universities (Biggs & Tang, 2007).

The factors of quality education in implementing the Outcomes-Based Education consider preparing the following curriculum, syllabus, and teaching strategy. The new policies, standards, and guidelines (PSGs) include a sample curriculum map which can indicate the extent to which the courses in the curriculum correspond to program outcomes. The intended curriculum is the design of the degree program that will try to achieve the program outcomes. It should describe not only the courses but also major teaching, learning, and assessment methods that lead to the outcomes. At the level of courses, the syllabus helps in shifting the paradigm from teacher-centered to student-centered learning.

Preparing the syllabus begins with the writing of

learning outcomes instead of course objectives. The syllabus usually contains the learning outcomes, the planned content, and methodology that will lead towards the learning outcomes, the learning resources to be used, the requirements, the grading system, and relevant policies for the class. In implementing the teaching-learning system Outcomes-Based Education (OBE) assumes a certain approach to delivering and assessing learning. There is a shift from the teacher being at the center of the learning process to the student being at the center of the learning process. This approach is also known as the Outcomes Based Teaching and Learning.

There are three basic assumptions in OBE as proposed by Dr. William Spady, these are learners can learn and succeed; success needs success and teaching institutions control the condition of success. OBE focuses on what should learn in a practical sense in comparison to traditional planning in education. Identifying what needs to be learned is the initial step in implementing OBE. Subsequently, the second step is to identify how the student will learn the desired learning outcomes dictates. The assessment and teaching strategies should be structured (Acharya, 2003).

In the international arena, Outcomes-Based Education (OBE) is applied to create a competitive advantage among other countries as early as 1980's. It is a process that involves reporting reaction in education to reflect the achievement of high order learning and



mastery rather than the accumulation of course credits (Tucker, 2004). To be able to cope up with the international standards of foreign universities and colleges, higher education in the Philippines are seeking new ways of designing education to improve the existing educational system of the country as well as to prepare students for facing the challenges of the 21st century.

Different individual under different circumstances have different ways of learning. In the Philippines majority of the students are still adapting the traditional means of teaching while often prefers home schooling, tutoring, and online education. Outcomes-Based Education (OBE) is an approach to education as well as a type of learning process wherein decisions about the curriculum are driven by the exit learning outcomes that the students should display at the end of the course (Davis, 2003). Spady (1994) stated that outcome-based education is designed so that all students are equipped with the knowledge, skills, and qualities needed to be successful after they exit the educational system. In this system, students can excel with their own interest and acquired knowledge in different ways in no particular time.

Implementation of Outcomes-Based Education (OBE) is the main concerned of most higher education institutions in the Philippines today Davis, (2003); Caguitla, (2013). Commission on Higher Education (CHED) Chairperson Patricia Licuanan had a Memorandum to all Presidents/Head of Public and Private Higher Education Institutions and to CHED Regional Directors last April 23, 2015. The subject of the said memorandum is the sample or suggested curricula for undergraduate programs in different disciplines aligned to Outcomes-Based Education (OBE). Attached on the List of Undergraduate Programs containing the 38 programs with Sample or Suggested Curricula Aligned to Outcomes-Based Education (OBE).

However, according to Dr. Arnold Ancheta, education supervisor II of Commission on Higher Education (CHED) Region 1, there are only three programs that passed the Policy Standard Guideline (PSG) in the implementation of Outcomes-Based Education (OBE). These are Bachelor of Science in Engineering, Bachelor of Science in Criminology and Bachelor of Science in Education. As a background,

there are four provinces in the Region, these includes the Mariano Marcos State University of Ilocos Norte, the University of Northern Philippines of Ilocos Sur, Don Mariano Marcos Memorial State University of La Union and the Pangasinan State University of Pangasinan Province. There are many programs offered by these universities, however, this study draws its attention on the following courses as well as Teacher Education, Criminology, and Engineering. These programs are the only programs in the region that passed the Policy Guideline Standard (PSG) in the implementation of Outcomes-Based Education (OBE), hence the study dwells on the extent of implementation of Outcomes-Based Education (OBE) in State Universities in Region 1.

CONCEPTUAL FRAMEWORK

Outcomes-Based Education (OBE) a strategy in the educational system skills that are essential or necessary for all learners to know, develop and perform at a desired level of competence when they finish college.

As presented in Figure 1 the study will be based on Input Process Output (IPO) model. This will focus on the administrator and faculty of the State University in Region 1 on the implementation of the Outcomes-Based Education (OBE) program which was anchored on the Theory of Practice of Harnish (2003), the researcher draw the framework to easily understand the study.

It can be noted in the aforementioned figure that there are five factors that served as inputs to this research: profile of the State University in Region 1; process or model; status of implementation; the level of achievement; and problems encountered. To achieve the intended output of the study, that of Implementation of the Outcomes-Based Education (OBE) of the State University in Region 1, the researcher undertook the following processes: document analysis and statistical treatment. On the basis of the significant findings of this research, an intervention scheme could be proposed to improve the implementation of Outcomes-Based Education (OBE) in State University in Region 1

REVIEW RELATED STUDIES AND LITERATURE

Aside from the three learning domains (cognitive, psychomotor and affective), these are eight



learning outcomes which are determined as important for students to acquire. Hence there is a shift toward outcomes-based education in teaching-learning process in the tertiary level of education. University Putra Malaysia has conducted a study to determine the extent to which these learning outcomes could be achieved. The result shows the overall perceived achievements as follows: cognitive domain was at level four, the psychomotor domain at level four and affective domain at level three. The Ministry's set of learning outcomes revealed the following results: KNOWLEDGE got the highest rate while the least achievable learning outcome was MANAGERIAL AND ENTREPRENEURIAL SKILLS. The results show that soft-skills among students were lacking and this problem needs to be addressed immediately and effectively.

First, a list of desired outcomes like of student behaviors, skills, attitudes, and abilities is created. Second, learning experiences are designed wherein teachers coach the students to a mastery level in each outcome. Third, students are assessed. Those who fail to achieve the required level of mastery receive remediation or retraining until mastery is achieved. Fourth, upon satisfactory the completion of learning outcomes the student graduates.

The Commission on Higher Education Memorandum Order (CMO) No. 46, s. 2012 spelled out, OBE comes in the form of competency-based learning standards and outcomes-based quality assurance monitoring and evaluation.

Caguimbal (2013) said that the news in a tabloid issue to A.Y. 2011-2012 revealed how students reacted to the implementation of the new educational scheme adopted by the university known as the Outcome-Based Education (OBE). During the dialogue with the PHOENIX, University President Peter P. Laurel he said that complaints and reactions from the students are expected because OBE was pilot tested this year. These comments could be used for the improvement of the OBE. Laurel added that OBE is a new trend in the Philippine educational system it must be good because all good institutions abroad are doing it. He mentioned that there is no excellent school without OBE. With

OBE, administrators and faculty members can work closely with students and OBE will be implemented in Soon, all institutions in the country will be implementing OBE.

CHED is improving the adopting of the outcomes-based approach to assessment (including monitoring and evaluation) because of its potential "to greatly increase both the effectiveness of the QA system, and the efficiency, and effectiveness of higher education." The Philippine Qualification Framework (PQF) was designed to align the local desired with the international norms. including that of the Association of Southeast Asian Nations (ASEAN) Qualifications Reference Framework, Washington Accord for engineering, Seoul Accord for information technology, Canberra Accord for architecture; and the Seaman's Training Certification Watchkeeping (STCW) for maritime.

The Washington Accord (WA) have shifted from an Input-Based to an Outcomes-Based Education (OBE) system, graduates of the accredited programs of member institutions should demonstrate an acceptable level of knowledge, skills, and attitude demanded in their fields of practice.

Bresciani (2006) stated in this book that the context of program review is the assessment of student learning outcomes. The same principles and practice on assessment of the teaching mission apply to student affairs, service, and research. This was intended faculty, administrators, and staff responsible for the outcomes-based assessment program review.

METHODOLOGY

The researcher utilized the normative survey or descriptive survey research to find out the implementation extent of Outcome-Based Education System. Descriptive research is ideal for the study since the study will measure the extent of the implementation of Outcome-Based Education System which will describe the frequencies, average, and other statistical calculation. According to Tim Birtwistle and Robert Wagenaar, descriptive research describes the four which is who, what, when, and how. The population or phenomenon being studied. In conducting a descriptive research, it is best to conduct a survey investigation with



the use of a data gathering instrument such as a questionnaire (Birtwistle & Wagenaar, nd).

Respondents of the Study

The respondents of the study included the six core positions of the three programs; these are the Vice-President for Academic Affairs, Director of Instruction, College Dean, Program Chair, and the Faculty. The respondents of the study were from State Universities in Region 1 namely Mariano Marcos State University (MMSU); University of Northern Philippines (UNP); Don Mariano Marcos Memorial State University (DMMMSU); and Pangasinan State University (PSU). The total number of respondents is 225.

Statistical Treatment of Data

In this study, the researcher used the following statistical measures to analyze and answer the data for each problem. For problem 1 which deals on the profile of the respondents in the implementation of the Outcomes-Based Education (OBE) system, frequency counts and percentage will be used.

For problem number two, on the level of status of the respondents in the implementation of the Outcomes-Based Education (OBE) system of vertically differentiated State Universities in Region 1 as perceived by the administrators and faculty members along the following elements of quality, frequency, and a percentage was used.

To find out the level of achievement of private in Region 1 in the areas of quality teaching and learning, average weighted mean (AWM) was used on problem number three.

The average weighted means (AWM) was categorized as follows:

Scale	Scale Mean	Descriptive Equivalent
5	4.21 – 5.00	Very High
4	3.41 – 4.20	High

3	2.61 – 3.40	Moderate
2	1.81 – 2.60	Low
1	1.00 – 1.80	Very Low

To answer problem number four, on the problems encountered by the administrators and faculty members in the implementation of outcomes-based education, average weighted mean (AWM) will be used.

The average weighted means (AWM) will categorize as follows:

Scale	Scale Mean	Descriptive Equivalent
5	4.21 – 5.00	Always
4	3.41 – 4.20	Oftentimes
3	2.61 – 3.40	Sometimes
2	1.81 – 2.60	Seldom
1	1.00 – 1.80	Never

To answer problem number five, the researcher proposed an action plan to improve the implementation of Outcomes-Based Education in State Universities in Region 1.

A. Research Population and Sample

The study covered State University from four provinces in the Region, these includes Mariano Marcos State University (MMSU) of Ilocos Norte, University of Northern Philippines (UNP) of Ilocos Sur, Don Mariano Marcos Memorial State University (DMMMSU) of La Union and Pangasinan State University (PSU) of Pangasinan Province respectively. Further, the study included three programs, these are Teacher Education, Criminology, and Engineering. The respondents of the study are comprised of the Academic Affairs, Director of Instruction, College Dean, Program Chair and Faculty Members.

DISCUSSION OF FINDINGS

A. Profile of the Respondents

Compliance of Degree Program. A total of 42 respondents from three colleges signifies 100 percent compliance as perceived by the administrator in implementing the Outcomes-Based Education (OBE) in State Universities in Region 1.



Qualification of College Dean and Program Chair. The majority of the college dean and program chair of Teacher Education program are Doctorate Degree holders with about (58.82 percent) and (41.17 percent) are Master's Degree graduate. Almost all of the teachers (70.58 percent) are LET/PBET passer. As for the training, a majority of the (88.23 percent) have attended OBE training. However, there is 11.76 percent who was not able to participate in OBE training.

In terms of the qualification of the college dean and program chair of criminology, 4 out of 5 are Doctorate Degree holders (80 percent) while the other one is Masters' Degree graduate (20 percent). It also reveals that 100 percent are criminologist specialists. As for the training, (100 percent) have attended OBE training and seminars.

In the Engineering program majority of the college dean and program chair, 13 out of 20 are Masters' Degree Graduate with (65 percent) while the other seven are Doctorate Degree holders with (35 percent). In terms of their chosen field of expertise, similar table reveals that there are 13 experts in Civil Engineering (65 percent), six are professionals in Mechanical Engineering (30 percent) and one expert in Electrical Engineering (5 percent). As for the exams passed, there are nine college dean and program chair who have passed the Civil Engineering examination (45 percent) while there is four college dean and program chair who succeeded in Mechanical Engineering examination (20 percent). Moreover, there is one college dean and program chair who passed in Electrical Engineering examination (5 percent). However, there are six college dean and program chair who did not specify if they have government examination.

Available Learning Resources and Support. The overall compliance of academic institutions of the three programs Teacher Education, Criminology, and Engineering as regards to library materials and resources is 100 percent. In terms of classrooms, the overall compliance with the set guidelines is 100 percent. As for the correspondence to the materials and resources of the laboratory, overall compliance is 100 percent.

Available Learning Resources and Support of Criminology Science Laboratory. In Criminology Program the minimum requirements for sustaining the overall set-up of the science laboratories, the overall compliance is 100 percent in terms of questioned documents, lie detection, forensic chemistry, and specialized laboratory. However, in terms of dactyloscopy, police photography, and forensic ballistics the overall compliance is 60 percent.

Available Learning Resources and Support of Engineering Laboratory. The overall compliance of institutions in Engineering program in meeting the standards established for the compliance of academies to the laboratories in terms of main laboratory and equipment inside the laboratory is 100 percent. Moreover, the audio-visual equipment overall compliance is 92 percent. However, the modernization of equipment overall compliance is 84 percent.

Available Learning Resources and Support of Teacher Education Laboratory. The overall compliance of academic institutions of Teacher Education program as regards to the availability of basic glassware and supplies for experiments overall compliance is 100 percent and basic equipment overall compliance is 94.38 percent.

Linkages. Generally, the compliance of academies in terms of partnerships/linkages of three programs Teacher Education, Criminology, and Engineering in government agencies is 100 percent. Moreover, other linkages in private institutions, non-government organizations, and people's organization are 90 percent.

Research Activities. The overall compliance of institutions to research activities of the three programs Teacher Education, Criminology, and Engineering is 100 percent.

Year of Implementation of the Outcomes-Based Education. The first program to adopt the OBE is the Engineering in 2011, followed by Teacher Education in 2012 and just recently the Criminology in 2015.

B. Process/Models Utilized in the Initial Implementation of Outcomes-Based Education

Process. Based on the responses obtained, the process in the initial implementation of Outcomes-Based Education in State Universities in Region 1 the overall utilization is 100 percent.

Models. Based on the data gathered, OBE models shows that the three programs: Teacher Education; Criminology and; Engineering 34respondents (80 percent) affirmed the models they utilized in the initial implementation of Outcomes-Based Education (OBE) are using the Behaviorist or specific task approach. Moreover, an attribute with eight respondents (20 percent) the models they utilized in the initial implementation of Outcomes-Based Education (OBE) are using the attribute or generic skills approach.

C. Status of Implementation of the Outcomes-Based Education of State Universities in Region I.

The level of Alignment and Consistency of the Learning Environment with the Institution's Vision, Mission and Goals. In terms of the level of alignment and consistency of the learning environment with the institution's vision, mission, and goals, a summated mean of 4.11 was computed indicating a "high" status as perceived by the school administrators and faculty.

The extent of Demonstration of Exceptional Learning and Service Outcomes. In general, the extent of demonstration of exceptional learning and service outcomes in program excellence is "high" as perceived by the school administration and faculty with an overall mean of 4.16. Moreover, in the manifestation of the institutional quality is "very high" as claimed both by the school administration and faculty as indicated by the overall mean of 4.23.

Development of Culture and Quality in Terms of the Level of Commitment and Full Support of Top Management. Overall, 4.75 summated mean was yielded indicating a "very high" level of top management support as evaluated by the administrators and faculty.

Development of Culture and Quality in Terms of the Frequency of Conduct of Capability Building. The overall conduct of capability building in the development of culture and quality is distinguished by the administration and faculty as "always" indicated by the garnered summated mean of 4.65.

Development of Culture and Quality in Terms of the Frequency of Utilization of Assessment of Outcome and Evaluation in the Program Level Using Direct and Indirect Method. Administrators and faculty observed that the students are "always" assessed through the direct method with an overall mean of 4.71. Indirect methods are also "always" utilized based on the responses of the administrators and faculty, as denoted by the overall mean of 4.75.

D. Level of Achievement of State Universities in Region 1 in the Areas of Quality Teaching and Learning

Governance and Management. The level of achievement of the academic institutions in terms of governance and management is "very high" as perceived by the administrators and faculty with a summated mean of 4.75.

The quality of Teaching and Learning. Generally, the school administration and faculty both recognized a "very high" level of success in providing quality teaching and learning among students as indicated by summated mean of 4.75.

The quality of Professional Exposure, Research and Creative Works. Research and Creative Works. Administrators and faculty both observed a "very high" level of success in terms of this aspect as indicated by the overall mean of 4.75.

Support for Students. In terms of support for students, administration and faculty both recognized a "very high" level of achievement having equal summated means of 4.75.

Relations with the Community. Administrators and teachers identified a "very high" level of achievement in terms of relations with the community as indicated by their respective means, 4.75.

Problems Encountered by the Administrators and Faculty Members in the Implementation of Outcomes-Based Education (OBE). In general, both administrators and faculty “sometimes” encounter problems in the application of the outcome-based education (OBE) as signified by the summated mean of 3.35.

CONCLUSIONS

Based on the findings, the following conclusions were drawn:

1. The State University in Region 1 has fully complied with the Commission on Higher Education (CHED) requirement with respect to curriculum, a number of units, OJT hours, and accreditation requirements.
2. Teacher Education program has a high level of compliance with the degree program; have educators who are doctorate degree holders, LET/PBET passes and mostly have OBE training; comply with the set standards for libraries, classrooms, and laboratories; have linkages to other institutions and comply with the standards of research.
3. Criminology program has a high level of compliance with the degree program; have faculty members who are master's degree holders, are criminalistics specialists,; have very high compliance level in libraries, classrooms, and laboratories; have partnerships with other organizations and comply with the research guidelines.
4. Engineering program has high level of compliance with the degree program; have educators who are master's and doctorate degree holders, are experts in Civil Engineering, have passed the Civil Engineering exam; have very high level of compliance in the maintenance of libraries, classrooms and laboratories; have very high level of compliance in terms of partnerships with other organizations; and have very high level of compliance to research.
5. The outcomes-based education has been adopted by the State Universities in Region I.
6. The quality assurance has been maintained and the overall all utilization of the initial implementation of outcomes-based education is very high.

7. A behaviorist or specific tasks approach and attribute or generic skills approach are the most utilized models in the initial implementation of outcomes-based education.
8. Administrators and faculties perceived a high level of implementation of the alignment and consistency of the learning environment with the institution's vision, mission, and goals; in the extent of demonstration of exceptional learning and service outcomes; and in the development of culture and quality in terms of the level of commitment and full support of top management.
9. Administrators and faculties perceived that conduct of capacity building in the development of culture and quality is distinguished by the administration as always.
10. Administrators and faculties perceived a very high level of assessment indirect method and high in indirect method.
11. Administrators and faculty both perceive a very high level of achievement in governance and management.
12. Administrators perceive a very high level of achievement in terms of quality of teaching and learning; and quality of professional exposure, research and creative works; and support for students; relations with community.
13. Problems in the implementation of OBE are sometimes encountered.

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