

Practices on the outcomes-based education (OBE) implementation in select HEI graduate school programs in the Philippines as input to institutionalizing mandatory accreditation



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ABSTRACT

This qualitative-quantitative research aimed to determine the extent of practices in the implementation of Outcomes-Based Education (OBE) among select Higher Education Institutions (HEIs) in Panay Island, Philippines in terms of an academic institution's Vision-Mission-Goals, faculty, curriculum and instruction, support to students, research, extension and community involvement, library, physical facilities, laboratories, and administration. Further, this study aimed to find whether the practices of the respondents on OBE implementation are influenced by the level of accreditation. The respondents of the study were the 120 permanent faculty members coming from 17 HEIs offering graduate school programs. The data gathered would provide the basis for institutionalizing mandatory accreditation among HEIs. Using the Accreditation Survey Instrument (ASI) of the Accrediting Agency of Chartered Colleges and Universities in the Philippines (AACUP), the results revealed that the extent of practices on the OBE implementation except in areas of research, and extension and community involvement were very satisfactory. The result is attributed to the fact that HEIs have met 50% greater than the standards, demonstrating good OBE practices in their graduate school programs. Furthermore, the results of the study also show that the challenges encountered by the faculty members in the practices of OBE implementation were evident in poor research outputs due to inadequate research and extension funds, resulting in weak extension, community involvement, and poor linkages. The level of accreditation of HEIs has a direct bearing and significant influence on the extent of their practices on OBE implementation. Therefore, accreditation is a practical scheme to evaluate and monitor quality program offerings among HEIs in the Philippines to maintain higher standards through OBE typology.

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1. Introduction

A pertinent provision of the 1987 Philippine Constitution, Article XIV, section 1, clearly asserts that the state "shall promote and protect the right of all citizens to quality education at all levels," and Article XIV, Section 2 provides that "the state shall establish, maintain and support a completely adequate and integrated system of education relevant to the needs of the people and society" (Sergio, 2012; Ruiz and Junio-Sabio, 2012). Anent to these, former President Benigno Aquino III signed

Executive Order 83 s. 2012 that would put in place an integrated system of quality education to address the mismatch in jobs and skills and generate employment. When Philippine President Rodrigo Duterte was elected into office in 2013, he signed into law Republic Act No. 10687, otherwise known as the Comprehensive and Unified Student Financial Assistance System for Tertiary Education (UniFAST). The very objective of this legal provision is to provide all Filipino citizens access to quality education and to issue mandates urging all HEIs in the Philippines to set their program offerings in line with quality standards (CHED, 2012a; 2012b).

To address these legal provisions, the CHED (2012a, 2012b) highlighted Memorandum Order Numbers 77 and 46, series of 2012, otherwise known as the "Policy Standard to Enhance Quality Assurance in the Philippine Higher Education through an Outcomes-Based and Typology Based

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Quality Assurance.” This order provides a mandate to all HEIs in the Philippines to contribute to building a quality nation capable of transcending the social, political, economic, cultural, and ethical issues that constrain the country's human development, productivity, and global competitiveness (CHED, 2012b).

Higher Education Institutions are now at crossroads faced with many new demands and challenges by this typology set by the CHED (2012b) in implementing Outcomes-Based Education (OBE) (Evardo, 2020). CHED's (2012b) curriculum revision highlights the transformation from content-based to competency-based or OBE curriculum. There are demands for curriculum revisions to meet the graduate learners' skills required in the fast-changing and global standard workforce needs. To adhere to this provision, they must review, revisit and realign the curricular programs offered with the international standards of foreign universities and colleges (Bravo, 2020). HEIs are now seeking new ways of designing education to improve the existing educational system of the country as well as to prepare students to face the challenges of the 21st century (Conchada and Tiongco, 2015).

Given that accreditation of HEIs in the Philippines is voluntary, most universities and colleges in the country assume that they are already undertaking some of the educational practices involved in OBE. What the CHED needs now is proper documentation of evidence of assessments and evaluation of the effectiveness of the program's educational objectives, which will prove that the graduates are equipped with essential knowledge, values, and skills that can contribute to the development of the community. To achieve world-class standards, accreditation among HEIs in line with Outcomes-Based Education (OBE) must be in place (Conchada and Tiongco, 2015). The low quality of HEIs in the country affects the economy's growth, which has implications for Filipinos' employability in other countries. With globalization and the growing demand for skilled workers, it is imperative to improve the quality of education, and one way is by establishing a credible accreditation system (Ulker and Bakioglu, 2019).

This study determines the extent of practices on the Outcomes-Based Education (OBE) implementation among HEI Graduate School Programs in Panay Island as input to institutionalizing mandatory accreditation. The results will serve as baseline information to guide educators in developing and improving their Institutions, formulating plans, finding solutions to the identified concerns or problems, and guiding educators and students to cope with the new educational approach. It aimed to determine the extent of practices in the implementation of Outcomes-Based Education (OBE) of the graduate school faculty members among HEIs in Panay Island in terms of VMGO implementation, faculty, curriculum and instruction, support to students, research, extension, and community involvement,

library, physical facilities, laboratories, and administration and to find whether or not the practices of the respondents on OBE implementation are influenced by their level of accreditation.

1.1. Theoretical framework

In order to provide a well-defined and proven basis for this present study, the following theory was applied: In the Learner-Centered Curriculum Theory of Dewey, he advocated and established a balanced curriculum in which the learning content obtained the learners' interests and needs. Schools around the globe proposed the same paradigm shift from an educator and content-driven curriculum to an outcomes-based and learner-centered curriculum – OBE. The idea postulated by the self-proclaimed father of the Outcomes-Based Education Theory, Spady, advocated that all students can learn and succeed. The three aspects of OBE stand out in this set of assertions: The focus on outcomes, the curriculum design process, and the responsibility of the school and teacher for the success of all students (Ortega and Cruz, 2016).

All the basic tenets of what is now called the 'outcome-based education' were elegantly set forth from the Principles of Curriculum Development Theory and Practice formulated by Tyler, stating that the real purpose of education is not to have the instructor perform certain activities but bring about significant changes in the student's pattern of behavior, it becomes crucial to recognize that any statements of objectives of the school should be a statement of changes to take place in the students (Harder, 2009). After Tyler came, Bloom's Taxonomy Theory of Educational Objectives became benchmarks in the formulation of specific objectives and the development of targeted criteria to establish the learners' attainment of acceptable standards against the desired learning outcomes. Bloom's work, particularly in addressing the cognitive, psychomotor, and affective domains, remains instrumental in assessing OBE (Tshai et al., 2014).

1.2. Conceptual framework

The research paradigm reflects the independent and dependent variables of the study. HEIs shall establish their prestige by upholding their academic standards and excellence by subjecting their academic program offerings to accreditation (Williams and de Rassenfosse, 2020; Do et al., 2021). As shown in the conceptual framework presented in Fig. 1, programs must compel or adhere to the minimum requirement of the accreditation process and improve their practices in the ten areas, including VMGO, faculty, curriculum and instruction, support to students, research extension and community involvement, library, physical plant, and facilities, laboratories, and administration. Mandatory accreditation is crucial to measuring practices and standards of HEIs Program Offerings. Therefore, through mandatory accreditation, HEIs

will be compelled to uphold the quality of their services toward meeting world-class standards (Tien

and Jose, 2021; Batoon, 2022).

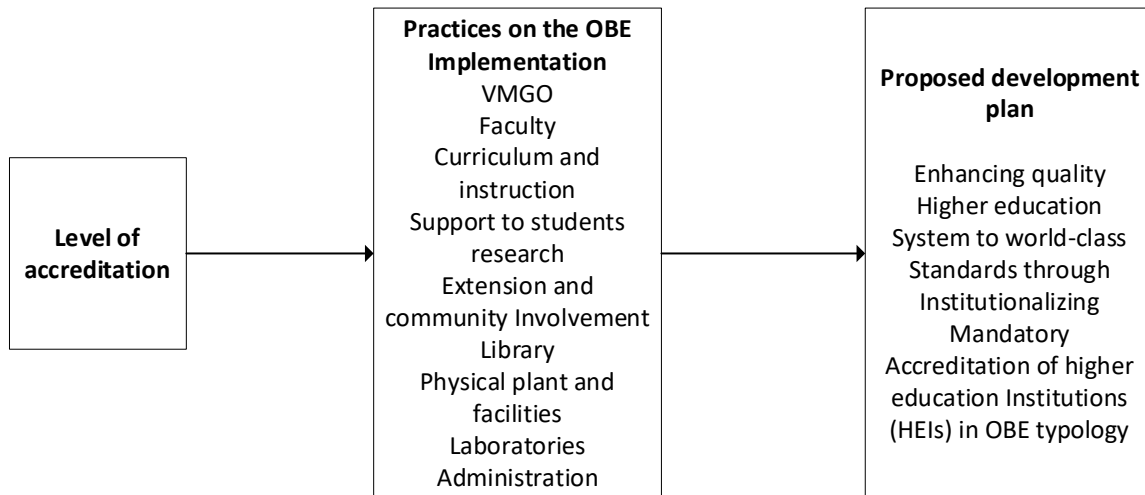


Fig. 1: Conceptual framework showing the relationships between independent and dependent variables

2. Research methods

2.1. Research design

The method used in this study was a combination of qualitative and quantitative designs to identify the practices on the OBE implementation of the respondents among HEI Graduate School Programs in Panay Island, which will serve as the basis for institutionalizing mandatory accreditation. A descriptive Research Design was employed to describe the profile of HEIs in terms of the graduate school program implemented and the level of accreditation. Quantitative data were gathered using a survey questionnaire to determine the extent of practices of the respondents on the OBE implementation among HEI Graduate School Programs in the ten areas of parameters in accreditation, namely: VMGO, faculty, curriculum and instruction, support to students, research, Extension and community involvement, library, physical facilities, laboratories, and administration and to find whether or not the practices of the respondents on OBE implementation influenced by the level of accreditation in each of the given areas.

2.2. Research respondents

The respondents and the subjects of the study were permanent faculty members of HEIs and teaching in their education graduate degree programs offering Doctor of Education (Ed.D) and Doctor of Philosophy in Education (Ph.D.), Doctor in Science Education (DSc), Doctor of Philosophy in Science Education (MathPhD), Doctor of Philosophy in Mathematics Education (Ph.D. M) Master of Arts (M.A.), Master of Arts in Teaching (M.A.T), Master of Arts in Education (M.A.Ed), Master of Arts in Industrial Education (MAIEd), Master of Education (M.E.) Master of Science (M.S), Master in

Instructional Leadership (M.I.LE), and Master of Management (M.M.) in Education.

2.3. Sample size and sampling technique

Seventeen 17 Higher Education Institutions (HEIs) in Panay Island, including their external campuses, offered education graduate degree programs in this study. From these campuses, only regular faculty members of HEIs currently involved in teaching education in their graduate degree programs were used as the study's respondents. The distribution of respondents per institution is presented in Table 1. From the total population of one hundred seventy-four (N=174) regular faculty members, the sample size comprising one hundred twenty (n=120) were randomly chosen and used as representatives of the study to answer a questionnaire adapted from the 2014 Accreditation Survey Instrument for Graduate Education Program published by the Accrediting Agency of Chartered Colleges and Universities in the Philippines (AACUP). The sample population size for each campus was determined using Cochran's formula.

2.4. Research instrument

The study used a questionnaire adapted from the 2014 Accreditation Survey Instrument for Graduate Education Program published by the Accrediting Agency of Chartered Colleges and Universities in the Philippines (AACUP), modified by the researcher and validated by the panel of experts from the institutional AACUP accreditors. A total of 150 attitudinal questions that covered the ten areas: VMGO, faculty, curriculum and instruction, support to students, research, Extension and community involvement, library, physical plant, and facilities, laboratories, and administration were administered to the respondents.

Table 1: Distribution of respondents

Higher education institutions	Education graduate program offered		Number of faculty	Sample size
	Master's degree	Doctorate degree		
Aklan Catholic College	MAEd	PhD	4	3
Aklan State University-Banga	MAEd	-	6	4
Aklan State University-Kalibo	MAEd	-	4	3
Aklan State University-NW	MAEd		6	4
University of Antique-Main	MAEd, MAT, ME	PhD	20	14
Capiz State University-Burias	MA, MM, MS	EdD	10	9
Capiz State University- Pontevedra	MA, MAT, MM	EdD	9	7
Capiz State University-Main	MAEd, MAIED,	EdD	17	11
Colegio Dela Purisima Concepcion	MAEd	PhD	5	3
Filamer Christian University	MAT	EdD	6	4
University of San Agustin	MAEd	PhD	6	4
West Visayas State University-Main	MAEd, MAT, ME, MA	Ph.D., DSEd, DSE, Math PhD	18	12
West Visayas State University-Lambunao	MAIED, MAT, MAEd	EdD	9	6
West Visayas State University-Calinog	MAEd	PhD	12	8
Iloilo Science and Technology University-Main	MA, MAIED, MS	EdD.DIT	18	12
Iloilo State College of Fisheries	MILE, MAEd	PhD	20	14
Northwestern Visayan Colleges	MAEd	-	4	3
	TOTAL		174	120

The Survey Questionnaire is composed of two parts: The first part was the determination of the profiles, including faculty demographics of the respondents in terms of institutional affiliation, the program taught, and the profile of the HEIs in terms of the education graduate degree program offered, and the accreditation level. The second part was composed of one hundred fifty attitudinal statements reflecting the assessment of faculty members on the extent of practices on implementing OBE in the Education Graduate School Programs based on the ten areas. These were measured using the five-point Likert Scales ranging from excellent to poor.

2.5. Validity and reliability of the instrument

Although the research instrument was standardized, some modifications were made to address the study's objectives. In order to ensure the reliability and validity of the instrument, it was submitted to the panel of experts from institutional AACUP accreditors for content and face validation. The recommendations and suggestions made by the panel were incorporated into the final copy of the instrument. Written permission to conduct and administer the questionnaire was addressed to the College/University President of the chosen HEIs. The instrument was personally administered, and the respondents signed a letter of consent, ensuring the study's academic purpose. Data gathered were tallied and interpreted using the prescribed statistical tool.

To determine the instrument's reliability, this was pilot tested on the graduate school faculty members of Northern Iloilo State University, Main Campus. They were not part of the respondents of the study. The instrument was statistically analyzed by applying the Cronbach alpha model, which is the most appropriate statistical tool that can be used to test the reliability of the instrument if it uses a Likert Scale. Based on the SPSS Survival Manual maintains that any instrument is required to have an alpha coefficient of at least 0.80 in order to be deemed reliable. The reliability test result was 0.988 for the extent of practices of OBE implementation in

graduate school programs, which was higher than the standard set (Bonett and Wright, 2015; Pallant, 2020).

2.6. Data analysis

The data gathered from the survey results were subjected to statistical analysis. Descriptive and inferential statistics were used in this study. Frequency Count, Percentages, Mean, and Standard Deviation were used to describe the profile of the HEIs in terms of the graduate school program offered, level of accreditation, and the Outcomes-Based Education practices of the respondents in the ten areas of parameters of the accreditation process. Lastly, Pearson's Chi-Square was utilized to determine the relationships between the extent of practices of the respondents on the OBE implementation in the ten parameter areas and the accreditation level obtained by the graduate programs offered at a 0.05% level of significance. Quantitative data were analyzed using SPSS software through the guidance of a licensed statistician.

2.7. Categorization/Scoring of variables

The extent of practices of the faculty members on OBE implementation in their Education Graduate School Programs was categorized as 5-Excellent, 4-Very Satisfactory, 3-Fair, 2-Satisfactory, and 1-Poor. The results were interpreted as follows:

- Excellent (E): The statement is fully met with a substantial number of good practices at a level that provides a model for others (75% greater than standards).
- Very satisfactory (VS): The statement fully met in all respects, at a level that demonstrates good practice (50% greater than the standards).
- Satisfactory (S): The statement is met in all aspects (100% compliance with the standards).
- Fair (F): The statement is met in most respects, but some improvement is needed to overcome weaknesses (50% lesser than the standards).
- Poor (P): The statement is met minimally in some respects, but much improvement is needed to

overcome weaknesses (75% lesser than the standards).

3. Results and analysis

3.1. Practices on the OBE implementation among HEI graduate school programs in Panay Island in terms of the ten parameters of accreditation

3.1.1. On vision mission goals and objectives (VMGO) implementation

Data in Table 2 revealed the extent of the practices of the faculty members on outcomes-based education in terms of VMGO implementation among HEIs graduate school programs is very satisfactory.

Results imply that respondents have fully met the 50% above the standards in implementing the VMGO of their programs in all aspects. Further, for the excellent result of VMGO to be effective, it must be defined along with its HEIs mission statements and functions. A shared vision of what they are trying to accomplish and that every Institution should establish clearly stated curriculum goals widely shared by teachers and students, administrators and parents. VMGO is vital to its existence and direction, vis-à-vis the national goals, responsive to the needs of its target clientele, resource requirement, and competencies of graduates (Pastrana and Manabat, 2014; Tan and Borres, 2020).

Table 2: Practices of OBE implementation in the area of VMGO

Vision, mission, goals, and objective	Mean	Verbal interpretation
1. The VMGO of graduate education is mandatorily included in their course syllabi and discussed with the students	4.52	Excellent
2. The VMGO of the graduate education represents the hierarchy of the program outcomes of the Institution	4.46	Very satisfactory
3. The Objectives of the graduate school program have the expected outcomes in the development of the knowledge, skills, and values of the students in Graduate Education	4.46	Very satisfactory
4. The VMGO of the graduate school picture the quality of graduates expected to be produced as a result of its outcomes	4.45	Very satisfactory
5. The students of the graduate school are trained to improve their own ideas, desirable attitudes, and personal discipline	4.43	Very satisfactory
6. The VMGO of the graduate school is aligned with the research and extension capabilities of the graduate students	4.43	Very satisfactory
7. The accomplishment of graduate school is leaning toward meeting world-class standards and producing graduates with lifelong learning competencies	4.39	Very satisfactory
8. All program outcomes of the graduate education are in consonance with its well-defined VMGO statements	4.38	Very satisfactory
9. There is congruency between the VMGO of the graduate school and the actual educational practices of the faculty members	4.36	Very satisfactory
10. The VMGO of the graduate school is leaning towards meeting world-class standards and producing graduates with lifelong learning competencies	4.35	Very satisfactory
11. The actual educational practices of the faculty members and the students of Graduate Education are congruently aligned with the VMGO of the University/College	4.34	Very satisfactory
12. The aesthetic and cultural values of the students are being developed through a well-defined Graduate School's VMGO	4.32	Very satisfactory
13. Critical, analytical, problem-solving, and other higher-order thinking skills of the Graduate School's students are highlighted in the VMGO	4.30	Very satisfactory
14. The graduate school faculty, personnel, students, and other stakeholders participate in the formulation, review, and revision of the VMGO during consultative meetings and community forums to develop clearly defined exit outcomes with input from the public	4.19	Very satisfactory
15. The graduate school strictly follows a system of formulating the goals and objectives of the program in consonance with the OBE principles	4.18	Very satisfactory
Grand mean	4.37	Very satisfactory

3.1.2. On faculty

The result of the study stipulated in Table 3 implies that the extent of practices of the graduate school faculty members on the OBE implementation in the area of faculty development and services showed a "very satisfactory" result. Furthermore, the excellent point can be associated with the demographic profile of the respondents showing that the majority of them are doctorate degree holders qualified, competent, and vertically aligned in their field of expertise. According to the provision of the CHED Memorandum Order (CMO) no. 36 series of 1998, vertical articulation of faculty roughly means that supposedly, the most qualified person to hold a position would be someone whose degrees are "vertically" aligned to his major discipline. In the academe, this means that the baccalaureate, master's, and doctoral degrees must all be in the same field. Faculty members teaching master's degree programs must be master's degree holders and doctorate holders for doctorate programs (CHED, 1998).

As a whole, graduate school faculty members fully met the requirement at a level that they demonstrate good practices showing 50% greater than the standards expected from them by the students and their institutions. Faculty members with a high level of knowledge and understanding of the implementation of OBE also have a higher possibility of contributing to the realization of the objectives of OBE through practices. The OBE approach promotes the effective use and integration of various teaching and learning strategies by the educator and learners. Thus, educational institutions realize the pressing need for their commitment to support academic staff by providing continuing professional development to educators and a facilitative learning environment to students that will help achieve the desired learning outcomes. Faculty members' continuous participation in training and seminars provides them with updates on the OBE process. Educators must be trained to understand the new approach and its challenges (Laguador and Dotong, 2014; Ortega and Cruz, 2016).

Table 3: Practices of OBE implementation in the area of faculty

Faculty	Mean	Verbal interpretation
1. The graduate school faculty members are qualified and competent with higher degrees vertically aligned in their field of expertise	4.57	Excellent
2. The faculty members demonstrate knowledge of recent educational trends/issues/resources in the field of education	4.45	Very satisfactory
3. The graduate education faculty members utilize exit outcomes that students must demonstrate or acquire, and intervention plans are developed before they can advance	4.44	Very satisfactory
4. The integration of values and work ethics is practiced by the Graduate School faculty members in their respective programs to enhance policy standards on quality assurance	4.44	Very satisfactory
5. The faculty members in the Graduate School are required to utilize ICT and other resources for the enhancement of the teaching-learning outcomes	4.44	Very satisfactory
6. Graduate school faculty members are gender sensitive	4.44	Very satisfactory
7. Faculty of graduate education assesses their students based on the outcomes which the students are required to demonstrate	4.44	Very satisfactory
8. The graduate education program strives to establish a climate that promotes a high performance of faculty members and students	4.43	Very satisfactory
9. The dean and the program head of the Graduate education systematically review the curriculum to assure that it supports OBE-based program outcomes	4.42	Very satisfactory
8. Education systematically reviews the curriculum to ensure that it supports OBE-based program outcomes	4.42	Very satisfactory
9. The faculty members of the graduate school are qualified and competent with higher degrees vertically aligned in their field of expertise	4.42	Very satisfactory
10. The faculty responsibly observes the exercise of academic freedom judiciously at all times to establish a climate that promotes the high performance of all students	4.37	Very satisfactory
11. The faculty must demonstrate skills and proficiency in the use of the language of instruction for the effective delivery of program outcomes	4.37	Very satisfactory
12. The graduate school faculty members are required to use ICT and other resources to enhance teaching-learning outcomes	4.32	Very satisfactory
13. The faculty responsibly observes the exercise of academic freedom judiciously at all times to establish a climate that promotes the high performance of all students	4.31	Very satisfactory
14. The faculty requires out-comes based outputs that are research-based	4.19	Very satisfactory
15. The graduate school education has an OBE steering committee comprising faculty members that oversee the full implementation of the program by the CHED	4.05	Very satisfactory
Grand mean	4.37	Very satisfactory

3.1.3. On curriculum and instruction

Data in [Table 4](#) describes that the extent of practices of the graduate school faculty members on the OBE implementation in terms of curriculum and instructions showed a very satisfactory result which means that respondents had fully met in all respects the outcomes of their curriculum and instructions offered at a level that they demonstrated good practices at 50% greater than the standards.

Outcome-based education is currently of much potential in the global educational landscape in improving curriculum and instruction. This recent

paradigm shift in the educational system helped teachers develop positive attitudes towards outcome-based education, and they are ready and willing to implement the approach by mentioning some key challenges. The positive attitude of teachers towards OBE, in terms of their knowledge, belief, feelings, acceptance level, and readiness should be backed up with concrete actions and concrete support from the institutional authority to better implement the desired curriculum and its approaches ([Ortega and Cruz, 2016](#); [Katawazai, 2021](#)).

Table 4: Practices of OBE implementation in the area of curriculum and instruction

Curriculum and instruction	Mean	Verbal interpretation
1. The faculty distributes a copy of the syllabus to each student	4.49	Very satisfactory
2. Teaching strategies are OBE-based that stimulate the development of the students' higher-order thinking skills (HOTS), such as critical thinking, analytical thinking, creative thinking, and problem-solving	4.45	Very satisfactory
3. Classroom instruction is enriched through interactive learning and reporting	4.41	Very satisfactory
4. Graduate education programs provide learning skills to students necessary for the industry	4.40	Very satisfactory
5. The education curriculum programs of the graduate school meet the maximum requirements and standards of CHED in line with OBE principles	4.38	Very satisfactory
6. The students are regularly informed of the academic requirements of their respective courses for curriculum review to ensure that it supports the intended learning outcomes	4.38	Very satisfactory
7. Graduate education develops, creates, and maintains a conducive atmosphere for the teaching and learning process	4.36	Very satisfactory
8. Specialized readings discussing and evaluating best practices in specific areas of professional specialization are used as reference materials	4.34	Very satisfactory
9. Graduate school students must conduct research and other activities prescribed in their curricula	4.32	Very satisfactory
10. The faculty members are encouraged to produce their instructional materials, such as modules, software, visual aids, manuals, and textbooks	4.32	Very satisfactory
11. The graduate education established a satisfactory OBE classroom climate, providing cooperative, well-directed, and purposeful activities	4.31	Very satisfactory
12. The graduate school faculty members developed readily available resources to present lessons using the OBE approach	4.24	Very satisfactory
13. The graduate school regularly reviews course levels and unit outcomes to assure relevancy	4.20	Very satisfactory
14. The assessment techniques for OBE are adequate and closely monitored by the authorities	4.12	Very satisfactory
15. Instructional materials (I.M.s) are reviewed and recommended by the duly created instructional materials committee (IMC)	4.10	Very satisfactory
Grand mean	4.33	Very satisfactory

3.1.4. On support to students

Results in [Table 5](#) imply that the extent of practices of the graduate school faculty members on the OBE implementation in terms of support to students clearly shows very satisfactory results.

These indicate that the respondents had fully met the outcomes of their support to students, showing that they demonstrated good practices at 50% greater than the standards.

The very essence of Outcome-Based Education is to focus and organize on what is essential for all

learners and be able to achieve these successfully at the end of their learning experiences. It means starting with a clear picture of what is essential for students to be able to do, then organizing the curriculum, instruction, and assessment to make sure this learning ultimately happens. The university management needs to motivate and promote OBE implementation at all times to sustain the momentum and achieve the desired outcomes. Eventually, outcomes-based assessment should encourage the reshaping of the various levels of outcomes and the rethinking of teaching and learning, and assessment tasks to ultimately prepare students for academic success and, importantly, life

success (Macayan, 2017). Establishing an OBE system for education is the best way for a particular learner to reach the desired outcomes. Ortega and Cruz (2016) asserted that the role of the educator is to enable and encourage all learners to achieve essential outcomes while the learner actively participates in and contributes to the learning process. If schools are to serve our nation effectively, the fundamental issue is not educational reform, but the outcomes (goals) needed to guide our students for those reform efforts. If reform is not linked to essential outcomes (goals), we may reform ourselves right back into another rising tide of mediocrity, but at a much higher cost.

Table 5: Practices of OBE implementation in the area of support to students

Support To students	Mean	Verbal interpretation
1. The institution has a student handbook containing comprehensive information on programs and services for students' welfare and development	4.34	Very satisfactory
2. The institution coordinates with the local authorities for the safety and sanitation of food service outside the school premises	4.33	Very satisfactory
3. Prompt, courteous, and efficient services in handling business transactions with students are evident	4.29	Very satisfactory
4. The programs and services offered are aligned with OBE principles that are closely monitored by the school authorities in order to guide students in developing their potential to the fullest	4.25	Very satisfactory
5. The institution ensures opportunities for students to participate in socio and civic action activities.	4.25	Very satisfactory
6. The projects and activities of the SAS unit are recognized and implemented	4.25	Very satisfactory
7. Regular monitoring and evaluation of the implementation of student services are conducted	4.20	Very satisfactory
8. Criteria for safety, sanitation, and food choices in the school canteen/cafeteria are enforced	4.14	Very satisfactory
9. Information materials on career and job opportunities are made accessible	4.14	Very satisfactory
10. The constitution and by-laws of a student organization in the Graduate School programs incorporate participation and advocacy in social action activities and are strictly imposed	4.13	Very satisfactory
11. The institution coordinates with the local authorities for the safety and sanitation of food service outside the school premises	4.12	Very satisfactory
12. The graduate school supports the implementation of student publication as provided for in R.A. 7079, otherwise known as the "Campus Journalism Act of 1991," and other media forms	4.10	Very satisfactory
13. Every student in the graduate school program has an updated profile at the guidance office	4.10	Very satisfactory
14. The graduate school has a student services program (SSP) that manages student affairs development and welfare programs	4.03	Very satisfactory
15. Students' research results and outputs are publicly disseminated and utilized to develop program outcomes among its stakeholders using print and electronic media	3.99	Very satisfactory
Grand mean	4.33	Very satisfactory

3.1.5. On research area

The results in Table 6 reveal the extent of practices of the graduate school faculty members on the OBE implementation in the area of research and development services is "FAIR." This means that respondents have met in most respects the OBE practices in this area, but some improvement is needed to overcome weaknesses. They demonstrated fair practices at 50% lesser than the standards.

Research is one of the University's trifocal functions and standards of accreditation in assessing the development of competent professionals. This is one of the mandatory requirements for undergraduate and postgraduate students in most HEIs in the country. Academic institutions also require their faculty members and individuals to engage in research to substantiate academic achievement and excellence. Conducting relevant research is part of the culminating activity of each course and shall provide strong evidence of OBE (Gómez and Panaligan, 2013).

Insufficient infrastructure for managing research grants, absence of graduate programs and

postdoctoral research, high faculty teaching loads, and diminutive criteria for tenure and promotion to enhance productivity are among the historical challenges in most public academic institutions (Huenneke et al., 2017). A study conducted by Valdehueza-Mahilum (2010) pointed out that the predictors of a deficient number of research turn-outs are associated with factors including heavy workload, lack of institutional funding, non-credit of research work for the promotion, and lack of de-loading scheme. Organizational commitment to support research engagement and hiring faculty with reduced teaching loads, students' involvement in the conduct of research, and modifying tenure and promotion criteria to reward research productivity are the counterpart solutions. Increasing research publication of faculty members in the peer-reviewed journal would also be a positive outcome (Huenneke et al., 2017). The administrative research support motivates the faculty to meet the actualization of developing their research capability. Such support is an intrinsic motivation for the faculty to undertake research as part of their school functions (Valdehueza-Mahilum, 2010).

Table 6: Practices of OBE implementation in the area of research

Research	Mean	Verbal interpretation
1. The research manual provides guidelines and procedures for the administration and conduct of research	3.50	Very satisfactory
2. The institution has a policy on intellectual property rights (IPR)	3.40	Fair
3. The graduate school's research agenda is in consonance with institutional, regional, and national priorities concerned, such as DOST, CHED, NEDA, etc., with approval from the authorities	3.50	Very satisfactory
4. The institution provides incentives to faculty researchers such as honoraria, service credits, unloading, etc	3.30	Fair
5. The graduate school has a system of implementation, monitoring, evaluation, and utilization of research outputs	3.40	Fair
6. The graduate school faculty members are mandatorily required to conduct applied and operational research in their fields of specialization in accordance with the thrusts and priorities of the program/institution	3.50	Very satisfactory
7. Completed and ongoing research studies are periodically monitored and evaluated in local and regional in-house reviews	3.52	Very satisfactory
8. Research outputs are utilized as inputs to the transfer of generated technology/knowledge to the community to provide them with livelihood opportunities	3.42	Fair
9. The institution has an approved and copyrighted Research Journal approved by the BOT/BOR	3.40	Fair
10. The institution provides opportunities for disseminating research results in fora, conferences, seminars, and other related means	3.40	Fair
11. Implementation, monitoring, evaluation, and research utilization of outputs are effectively conducted by the graduate school faculty and students to ensure the transfer of technology to the clientele	3.45	Fair
12. Packaged technologies and new information are properly disseminated to the target clientele through appropriate delivery systems like print and electronic media to communicate program outcomes	3.45	Fair
13. Library exchange of research publications with other HEIs and agencies is well maintained	3.50	Very satisfactory
14. Research results are published in a refereed journal indexed at Scopus and ISI	2.50	Fair
15. Graduate school generates income from patents, licenses, copyrights, and other research outputs	3.40	Fair
Grand mean	3.38	Fair

3.1.6. On extension and community involvement

The results of the study presented in Table 7 imply that the extent of practices of the graduate school faculty members on the OBE implementation through extension and community involvement reveal Fair practices. This means that respondents have met in most respects the OBE practices in this area, but some improvement is needed to overcome weaknesses. They demonstrated fair practices at 50% lesser than the standards.

Extension and community involvement shall work in tandem with research. Since Extension is a product of research, HEIs' function is to help the social needs and development of the community. It is therefore recommended for universities to be engaged. They must build their capacity to deliver, accept, and embed community engagement.

University extension must be monitored for success and proactively implemented; it must be regularly evaluated to ensure relevance and effectiveness. To do away with community outreach and dole-out programs, HEIs must strengthen and widen linkages and partnership buildings with various governments and non-government organizations and enhance instruction-research-extension bonds. It would also be better to promote participatory Extension to make community programs emancipatory and sustainable (Mojares, 2015). It is through this practice that the academe's duty to ensure efforts have a significant impact or relevance to society's objective of alleviating poverty and equity and respond to the Research, Development, and Extension agenda of HEIs vis-a-vis the sustainable development goals of the government.

Table 7: Practices of OBE implementation in the area of extension and community involvement

Extension and community involvement	Mean	Verbal interpretation
1. The extension agenda is in consonance with local, regional, and national development thrust and priorities	3.50	Very satisfactory
2. The institution plans and implements an extension program that is need-and client-based	3.40	Fair
3. The extension program conducted by graduate education has contributed to improving the quality of life of the target clientele/beneficiaries	3.40	Fair
4. Graduate school has extension activities that empower students with appropriate knowledge, attitudes, and skills effectively transfer to their respective stations	3.46	Fair
5. The institution has priority and relevant extension projects and activities that are conducted as mandatorily required in the curriculum of the Graduate Education program	3.42	Fair
6. The extension projects are documented in the form of written (pamphlets, flyers, bulletins, newsletters) and electronic resources	3.40	Fair
7. Extension services are required for all graduate school programs	3.48	Fair
8. The local government units actively participate in the extension services conducted by graduate education	3.40	Fair
9. The administration, faculty, students, and other stakeholders of graduate education participate in the planning and organization of the extension program	3.40	Fair
10. The graduate school program has active linkages with institutionalized local, national, foreign, and non-governmental agencies	3.40	Fair
11. A mutual exchange of resources and services between the Graduate School and the community is evident	3.40	Fair
12. Assessment of the extension activities is closely monitored and evaluated by authorities to ensure that the target clientele's needs are appropriately addressed	3.48	Fair
13. The extension projects and activities complement the curriculum of the graduate education program and are required to be included in every course syllabus following the OBE approach	3.50	Very satisfactory
14. The need assessment survey in the community is appropriately conducted by the institution regularly through its program unit for effective delivery of extension services	3.30	Fair
15. Monitoring and evaluation results are appropriately disseminated and discussed with concerned stakeholders	3.40	Fair
Grand mean	3.42	Fair

3.1.7. On library services

The results shown in [Table 8](#) imply that the extent of practices of the graduate school faculty members on the OBE implementation through their library services showed very satisfactory results. This means that respondents had fully met in all respects the outcomes of their library services at a level that they demonstrated good practices at 50% greater than the standards.

CHED Memorandum Order No. 22, series of 2021, provides guidelines for the minimum requirements for libraries of Higher Education Institutions in the Philippines. The operation of HEIs libraries is typical of all program offerings. It shall provide services within its mandate as prescribed in its vision and mission statements with a clearly defined organizational structure managed by a licensed full-time head librarian. The collection management, such as selection and acquisition, library holdings, organization, and preservation, is within the [CHED \(2021\)](#) standards. The services utilization shall provide various facilities and resources and be made available for every user ([CHED, 2021](#)).

University libraries should clearly describe their resources and services that directly support the learning environment, how these are used, and their effects on students and faculty developing

information literacy skills. Electronic and networked resources and services and their increasing importance in accreditation standards underscore the growing expectation that academic libraries demonstrate how these resources and services support student learning and faculty research. Outcome assessment for the library should be treated like any other academic department to determine if it was able to contribute to the achievement of learning outcomes for various academic programs across the University. It is an essential tool to assess how well its services and facilities support the VMGO of the institutions. It is vital to identify the current problems of management and service impact on technologies and recommend ways to improve such services ([Fraser and McClure, 2002](#); [Pila et al., 2016](#); [CHED, 2021](#)).

Graduate school libraries of HEIs in Panay Island are within the standards set by the [CHED \(2021\)](#). Assessment domains for the library learning outcomes and enabling instructional outputs; scholarly productivity, institutional viability, and vitality; access, availability, and use of teaching-learning resources; and infrastructure (human resources, collections, and equipment/facilities.) are within the minimum standard.

Table 8: Practices on OBE implementation in the area of library services

Library services	Mean	Verbal interpretation
1. The atmosphere in the graduate school library is conducive to learning	4.27	Very satisfactory
2. Space is provided for print resources as well as workstations for electronic resources	4.25	Very satisfactory
3. The reading room can accommodate at least 10% of the school enrollment at any given time	4.23	Very satisfactory
4. The library is strategically located and accessible to students, faculty, and other clientele	4.23	Very satisfactory
5. The organizational structure of the graduate school library is well-defined	4.21	Very satisfactory
6. The collection development policy is regularly reviewed and evaluated by the library committee	4.21	Very satisfactory
7. Linkages with other institutions and funding agencies are explored and adequately established to enhance library facilities and resources for clearly defined exit outcomes	4.18	Very satisfactory
8. The library establishes consortia, networking, resource sharing with other institutions, and collaborative library activities	4.18	Very satisfactory
9. Statistical data on the utilization of various resources and services are compiled and used to improve the library collection and operations	4.16	Very satisfactory
10. The library promotes and disseminates its program by regularly announcing its new acquisitions of print materials (books, journals, and magazines), resources, facilities, and services	4.14	Very satisfactory
11. Barcoding and online database are services offered in the library	4.10	Very satisfactory
12. The library core collection of the graduate school is adequate, updated, and well-balanced.	4.10	Very satisfactory
13. The quality and quantity of library materials and resources conform to the standards set by the graduate education programs and are closely monitored and evaluated by the authorities	4.10	Very satisfactory
14. The professional books, journals, and electronic resources for the program are sufficient	4.04	Very satisfactory
15. Regular weeding-out program is conducted to maintain a relevant and updated collection	3.99	Very satisfactory
Grand mean	4.16	Very satisfactory

3.1.8. On physical plant and facilities

The results of the study in [Table 9](#) showed that the extent of practices of the graduate school faculty members on the OBE implementation through their physical plant and facilities shows very satisfactory results. These imply that respondents had fully met the outcomes of their physical plant and facilities at a level of demonstrating good practices at 50% greater than the standards.

The implication of these results points to the importance of respondents' feedback regarding physical plants and facilities management areas of HEIs. It is because clientele satisfaction has shown to

be significantly related to the condition of the graduate school Higher Education Institution in Panay Island. Therefore, facilities are among the significant factors determining their OBE practices in achieving teaching-learning objectives. Hence, deplorable facilities pose a gap in the achievement of these set objectives.

According to [Abdullahi and Yusoff \(2019\)](#), educational infrastructures are the physical properties and facilities that contribute remotely or directly to the teaching and learning process in the educational system. Physical assets and facilities environment give educational institutions their appropriate shape and atmosphere for teaching and

learning. The development of facilities and physical assets in higher education institutions is cost-intensive and complex. Therefore, safeguarding their quality and maintaining it to acceptable global best practices is very challenging. The development of facilities and physical assets in higher education institutions includes providing buildings such as lecture halls, classrooms, staff quarters, hostels, workshops, laboratories, ICT centers, libraries, sports facilities, and health centers. Accreditation has now become one of the essential mechanisms of

policy instruments and reforms for higher education institutions to adapt to increasing expectations from external and internal stakeholders nationwide. The most significant challenge to most HEIs in the Philippines is to improve their infrastructure and facilities for higher education institutions to metamorphose into the inevitability of proving that they are providing quality education. It provides empirical evidence that high levels of learning among students are partly attributed to adequate facilities in the school.

Table 9: Practices of OBE implementation in the area of physical plant and facilities

Physical plant and facilities	Mean	Verbal interpretation
1. The administrative offices are accessible to stakeholders	4.40	Very satisfactory
2. All offices are accessible and conveniently located according to their functions.	4.37	Very satisfactory
3. There are offices and workplaces for all officials, faculty, and administrative staff	4.34	Very satisfactory
4. The graduate school has accessible good roads and pathways	4.25	Very satisfactory
5. The graduate school buildings and other facilities are safe, well-maintained, and functional to effectively cater to the needs of the clientele	4.24	Very satisfactory
6. The graduate school's campus has a well-functional audio-visual room for all educational activities for the effective delivery of program outcomes	4.18	Very satisfactory
7. The graduate school has adequate and appropriate classrooms that are conducive to learning for the successful delivery of program outcomes	4.18	Very satisfactory
8. Bulletin boards, display boards, waste disposal containers, and other amenities are strategically located inside the buildings	4.17	Very satisfactory
9. The graduate school has accessible good roads and pathways	4.13	Very satisfactory
10. Water facilities are functional and well distributed in the graduate school buildings	4.08	Very satisfactory
11. Clean and sanitary toilets for men, separate from those for women, are available	4.04	Very satisfactory
12. The food services generate income for the Institution	4.03	Very satisfactory
13. There is wholesome coordination among the institution, the LGU, and the owners of private boarding houses	4.03	Very satisfactory
14. Toilet fixtures for students with special needs and PWDs are provided	3.94	Very satisfactory
15. There are dormitories and housing facilities for students, faculty, and staff	3.79	Very satisfactory
Grand mean	4.13	Very satisfactory

3.1.9. On laboratory services

As presented in Table 10, the extent of the practices of the graduate school faculty members on the OBE implementation is very satisfactory in terms of their laboratory services. These indicate that respondents had fully met in all respects the outcomes of their laboratory services at a level that they demonstrated good practices at 50% greater than the standards.

Lacaba et al. (2022) emphasized that safety and functionality, availability, and the preservation of the laboratory facilities and equipment are the main objectives that can help maintain and improve the system effectiveness of the laboratories and the quality of the teaching-learning process. Equipment availability and functionality during laboratory work would significantly contribute to a better teaching-learning process. Students can perform the required works or experiments using the equipment and facilities within a given time frame. Proper planning and system implementation for the laboratory is essential for the laboratory system's effectiveness. In the case of the graduate school HEIs, changes have been applied to address the CHED-mandated requirement and the present demand of the industries, and changes in terms of revision of the curriculum program, expansion of physical plants, updating the laboratory equipment, and even re-organization of the present organization. Indeed, extreme environmental conditions and ineffective systems would contribute to equipment deterioration and maintenance staffing levels, training, and management practices. An adequate

system dramatically depends on planning. It will fail unless the facilities' effective system planning is a more excellent organizational management plan component. Thus, effective system planning must be an element of the overall organizational strategy. Good plans include short-and long-term objectives, budgets, and timelines, demonstrating organizational commitment to system effectiveness.

3.1.10. On administration

The results shown in Table 11 imply that the extent of the practices of the graduate school faculty members on the OBE implementation is very satisfactory in terms of their administrative services and functions. This means that respondents had fully met in all respects the outcomes of their administrative services and functions at a level that they demonstrated good practices at 50% greater than the standards.

According to Batugal and Tindowen (2019), the administration element must be strengthened and maintained because the lifeblood of management starts with it. People managing the academic Institution should know that essential matters are about the administration of the faculty and staff, the students, and even the alumni of every school. Successful organizational performance underlies a healthy administrative condition displaying an economic institution's steady aptitude to establish a mutually synergic dynamic equilibrium with its environment (Lacaba et al., 2022).

Table 10: Practices of OBE implementation in the area of laboratories.

Laboratories	Mean	Verbal interpretation
1. Laboratory equipment, supplies, and materials for each of the laboratory subjects are in accordance with guidelines/policies embodied in the CHED memorandum order (CMO)	4.23	Very satisfactory
2. There is a computer laboratory with at least 15 usable computer units and a printer	4.23	Very satisfactory
3. Graduate school faculty members teaching laboratory subjects are required to prepare OBE Syllabi and are closely checked by the authorities for the effective delivery of program outcomes	4.23	Very satisfactory
4. Varied computer software is readily available for faculty and student use	4.22	Very satisfactory
5. Computer Laboratories equipped with enough computer facilities and license software	4.20	Very satisfactory
6. Science laboratories for science-related activities	4.17	Very satisfactory
7. The equipment, instruments, supplies, and materials in the classrooms are available	4.17	Very satisfactory
8. Safety devices and measures like usable fire extinguishers are accessible to staff and students to cope with emergency situations are readily available	4.17	Very satisfactory
9. The OBE principles are strictly implemented in all laboratory classes and investigations and are closely monitored by the Dean and program chairs for proper implementation	44.16	Very satisfactory
10. The laboratory equipment/instruments are in good condition and are periodically calibrated	4.14	Very satisfactory
11. Graduate school has appropriate laboratories for general education subjects and are adequately equipped and well-maintained and can be used by graduate students during office hours	4.13	Very satisfactory
12. Demonstration farms, shops, and other facilities for practicum services are essential for the effective delivery of program outcomes	4.13	Very satisfactory
13. Speech laboratories equipped with functional amenities	4.11	Very satisfactory
14. There are laboratory operation manuals for the faculty and students that are provided in each laboratory approved by the BOR/BOT	4.10	Very satisfactory
15. Waste disposal is efficiently and effectively managed	4.08	Very satisfactory
Grand mean	4.17	Very satisfactory

The administration is an educational institution's engine in attaining its VMGO. The Institution is concerned with general affairs as well as its organizational performance. Thus, the administration initiates institutional processes and ensures that said processes are satisfactorily implemented. It includes the Academic unit (college) administration and Campus Administrative Support (Batugal and Tindowen, 2019). Pursuing sustainable performance in public HEIs requires using a performance management system to foster decision-makers learning processes in dealing with the specific complexity factors that challenge the success and survival of such organizations in the context where they are located. Though various dimensions

characterize the performance management application domains and levels in such fields, a crucial issue is the need for outcome-based approaches in assessing the impact of adopted strategies in HEIs. This perspective is particularly significant in public Universities due to the role that such organizations expect to play in society, such as developing human capital and impacting socio-economic context development. This vital outcome requires that performance management efforts may strive toward performance governance and stakeholder collaboration (Madriaga, 2015). Since leaders are usually in control of these essentials, effective leadership is critical for change to take place.

Table 11: Practices of OBE implementation in the area of administration

Administration	Mean	Verbal interpretation
1. The graduate school has a well-designed and functional organizational structure approved by the BOR/BOT	4.32	Very satisfactory
2. Concerned officials, faculty, and staff act promptly on request need delivery on reaction problems of the students	4.32	Very satisfactory
3. The institution has a sound and effective financial management system	4.32	Very satisfactory
4. The institution has policies and procedures to ensure the security and confidentiality of records	4.31	Very satisfactory
5. All procurement transactions are transparent	4.29	Very satisfactory
6. The institution has a system of record keeping	4.28	Very satisfactory
7. The institution has an efficient and effective supply management system	4.27	Very satisfactory
8. The SDP is congruent with the VMGO, as well as with local, regional, and national development goals.	4.26	Very satisfactory
9. Policies and procedures for prompt release of records are in place	4.25	Very satisfactory
10. The budget of the institution is fairly and objectively allocated in all programs and activities	4.24	Very satisfactory
11. The results of performance evaluation on the administrative staff are utilized to improve performance, delivery of services, and promotion	4.23	Very satisfactory
12. The institution regularly monitors and evaluates the performance of the administrative staff	4.23	Very satisfactory
13. The strategic development plan (SDP) is implemented, monitored, evaluated, reviewed, and updated regularly	4.22	Very satisfactory
14. The institution has a commendable record management system	4.20	Very satisfactory
15. The institution maintains a record management office (RMO) managed by a qualified record officer	4.16	Very satisfactory
Grand mean	4.17	Very satisfactory

3.2. Extent of practices on the OBE implementation among HEI graduate school programs in ten parameter areas of accreditation as a whole

When the 120 respondents were taken as a group, data in Table 12 reveal that the extent of the practices of the graduate school faculty members on the OBE implementation in the ten parameter areas is very satisfactory. Data also show that in all the ten parameter areas, the grand means ranged from 4.12 to 4.37, and the highest means of 4.37, which was

verbally interpreted as "very satisfactory," were in the areas of VMGO and Faculty, where these two shared the same mean, followed by curriculum and instruction, administration, library, support to students, laboratories, physical plant and facilities and the with the lowest mean is in the area of research, and extension services. Taken as a whole, the extent of practices of the respondents on the implementation of OBE in Panay Island has fully met in all respects that they demonstrated 50% greater than the standards.

The various challenges encountered by the faculty members in the practices of OBE implementation were evident in poor research outputs due to inadequate research and extension funds, resulting in weak extension, community involvement, and poor linkages. According to CHED, it is a basic requirement for an educational institution to have firmly established research and development programs. Its thrusts and priorities should be congruent with those identified in the development plans of regional and national R and D-oriented agencies such as NEDA, DOST, CHED, etc. The institutional leadership in research should be proactive and developmental in orientation. It must provide adequate and sustained budget allocation annually for the Academic Unit. The Extension and community involvement must establish a strong partnership with research since the former is the by-product of research. It involves the application of existing and new knowledge and technology and those generated in the Institution to improve the quality of life of the people. The Institution plans and implements an extension program that is need- and client based. This program should have budgetary support and other resource allocation. Budget allocation for the second major function of SUC, the research services, and the third major function, which is the extension services, shall be set at a fixed rate of 10% of the tuition fees (CHED, 2011).

The most averting factors why most faculty members decline to conduct research and publish their outputs are lack of interest, faculty disengagement, lack of rigid training on publication, fear of rejection by journals, limited funds, and institutional support. Despite faculty members' foot-dragging in research, the CHED (2012b) in the Philippines has been profound in advocating and compelling faculty members engage highly in yielding research outputs. Thus, Memorandum Order No. 46 Series of 2012, Article V, mandated HEIs to contribute to nation-building by providing highly specialized educational experiences to train experts in the various technical and disciplinal areas and emphasizing the development of new knowledge and skills through research and development (CHED, 2012b; Quitoras and Abuso, 2021).

The CHED (2012b) was constantly finding ways to address the issue. Reforms are being set in places

such as rationalizing the structure of public higher education and improving the higher education budget to ensure resource mobilization and cost-effectiveness. However, these reforms will not be enough if HEIs themselves are not pressured to constantly improve and set standards above the minimum requirement through OBE-typology. CHED's approach to Quality Assurance (Q.A.), as stipulated in CMO No. 46, series of 2012, is developmental, with the goal of helping the HEI develop a culture of quality. CHED will work with institutions to assist them in strengthening their management of academic and administrative processes so that they are better able to achieve their quality goals and educational objectives. Where there are serious weaknesses or failures to comply with conditions attached to permits or recognitions, CHED will expect remedial action to be taken and will use its powers in relation to such shortcomings as appropriate (CHED, 2012b).

Table 12: Mean score of OBE implementation in ten areas

Variable	Mean	Verbal interpretation
Vision, mission, goals, and objectives (VMGO)	4.37	Very satisfactory
Faculty	4.37	Very satisfactory
Curriculum and instruction	4.33	Very satisfactory
Administration	4.25	Very satisfactory
Library	4.21	Very satisfactory
Support to students	4.18	Very satisfactory
Laboratories	4.17	Very satisfactory
Physical plant and facilities	4.13	Very satisfactory
Extension and community involvement	3.42	Fair
Research	3.38	Fair
Grand mean	4.08	Very satisfactory

3.3. Profile of higher education institutions in Panay Island

Data in Table 13 provides the profile of the HEIs which served as the participants of the study. This profile presents the education graduate degree program offered and their accreditation status. As stipulated on the research survey instrument, all information provided by the respondents will be treated strictly as confidential and purely for academic purposes only. There were 5 Private HEIs and 12 SUCs participated in the study. Codes were used to represent the names of the HEIs in Panay Island covered by this study.

Table 13: Profile of the HEI in Panay Island and their graduate degree program offerings

Higher education institutions (HEIs)	Program offerings	Status of accreditation
Private HEI 1	MAEd, PhD	Level II
Private HEI 2	M.E.	None
Private HEI 3	MAEd, PhD	Level 1
Private HEI 4	MAEd, PhD	Level I
Private HEI 5	MAT, EdD	Level I
SUC 1	MAEd, PhD	Level II
SUC 2	MAEd	Level 1
SUC 3	MAEd	Level II
SUC 4	MAT,ME,PhD	Level 1
SUC 5	MAIEd,MM; MAEd, Ed	Level I and II
SUC 6	MA,MM,EdD	Level II
SUC 7	M.A., MAT, MM, EdD	Level 1 and III
SUC 8	MAEd, PhD, EdD	Level I and IV
SUC 9	MAIEd, MAT, EdD	Level II
SUC 10	MAEd, PhD	Level II
SUC 11	MAEd, PhD	Level II
SUC 12	MS, EdD, DIT	Level I and III

3.4. Accreditation status of graduate degree programs offered by HEIs in Panay Island

Data in Table 14 reveal that 15 or 12.5% of the program offered by HEIs in Panay Island were not yet accredited by any recognized accrediting agency, 42 or 35% obtained level I, 44 or 36.7% attained Level II, 7 or 5.8% were granted Level III and 12 or 10% have reached Level IV in accreditation standards. This denotes that most of the education graduate degree programs offered in HEIs in Panay Island were at standard as required by the CHED (Biglete, 2018). Data also revealed that the majority of the program offered by HEIs in Panay Island was almost between Level I and II, and only a few have reached Level III and IV, while others have not yet been accredited by a recognized accrediting agency.

However, the results of this study are limited only to HEIs in Panay Island, and this does not represent the actual results of the status of accreditation of HEIs in the whole Philippines. Arcelo (2003) affirmed that accreditation would continue to play a crucial role in enhancing the quality of Higher Education in the Philippines. There will be tremendous pressure to accelerate the procedure, mainly because most of the higher education programs in the Philippines are yet accredited. This was confirmed by the results of the study conducted by Conchada and Tiongco (2015) on "A Review of the Accreditation System for Philippine Higher Education Institutions," which revealed that the voluntary nature of the accreditation system in the country has resulted in a shallow turn-out rate, with a little over 10 percent of the total number of programs have undergone accreditation (Arcelo, 2003; Ruiz and Junio-Sabio, 2012; Conchada and Tiongco, 2015).

Table 14: Accreditation status of graduate degree programs offered by HEIs in Panay Island

Level of accreditation	Frequency	Percentage
Not yet accredited	15	12.5
Level I	42	35.0
Level II	44	36.7
Level III	7	5.80
Level IV	12	10.00
Total	120	100

The results of the accreditation process conducted by the accrediting bodies among HEIs will depend on the outcome and input-based criteria with several quality indicators. In the Philippines, favorable outcomes of the accreditation merit autonomy, while other forms of quality assessment merit funding and subsidy for the programs that have undergone the different phases of the evaluation process. Therefore, accreditation is necessary for the HEIs to keep themselves on track with the standardized criteria. With the increasing number of HEIs in the country and the highest demand for skilled workers on a global scale, there is an urgent need to enhance quality education (Corpus, 2003; Conchada and Tiongco, 2015).

The benefits and incentives HEIs from accreditation may also vary depending on the status.

Philippine Accrediting Association of Schools Colleges and Universities (PAASCU) outlined the benefits and incentives of accreditation that vary on different levels of accreditation. For Levels I and II, HEIs are granted:

1. Full administrative deregulation
2. Financial deregulation
3. Authority to revise the curriculum without CHED approval
4. Authority to graduate students from accredited courses or programs of study in the levels accredited
5. Priority in the awards of grants/subsidies or funding assistance from CHED-Higher Education Development Fund (HEDF) for scholarships and faculty development, facilities improvement, and other development programs
6. Right to use on its publications or advertisements the word Accredited according to CHED policies and rules; and
7. Limited visitation, inspection, and supervision by CHED supervisory personnel or representatives.

The same benefits apply to those who are accredited in Level III, including:

1. Authority to offer new courses allied to existing Level III courses without the need for prior approval; and
2. Privilege to apply for authority to offer new graduate programs, open learning/ distance education, extension classes and to participate in transnational education.

In Level IV, the Institution is granted the benefits of Levels I, II, and III, as well as complete autonomy for the particular program and as well as authority for all programs for the duration of its Level IV accredited status (Corpus, 2003; Ching, 2013; Conchada and Tiongco, 2015).

3.5. The relationship between level of accreditation and OBE practices

Table 15 shows that the areas where the extent of the practices of the graduate school faculty members on the OBE implementation found to have significant relationships to Accreditation are evident in the areas of Curriculum and Instruction, Support to Students, Library, Laboratories, and Administration. The results imply that HEIs Graduate School Programs in Panay Island have met the standards of quality over and above the minimum requirement under CHED memorandum No. 46, series of 2012 in these parameter areas of Accreditation. Conversely, weak points are present in VMGO, Faculty, Research, Extension, Community Involvement, and Physical Plant and Facilities areas. The extent of the practices of the graduate school faculty members on the OBE implementations was found to have no significant relationship to Accreditation in these areas. This result implies that HEIs Graduate School Programs in

Panay Island have not fully met the standards of quality based on the existing mandates of the CHED. Moreover, looking into the whole perspective, Accreditation has a significant relationship with OBE practices. As expressed in Table 15, overall results, the accreditation status obtained by the HEIs in Panay Island was significantly influenced by their OBE practices ($X^2 = .003, p = .05$). The majority of the respondents viewed that Graduate Schools in Panay Island were OBE compliant in terms of VMGO, faculty, curriculum and instruction, support to students, research, extension and community involvement, library, physical plant and facilities, laboratories, and administration. It is viewed that Accreditation is a framework that improves the quality outcomes of Higher Education Institutions in the ten parameter areas of Accreditation through self-survey and validation of independent accrediting bodies.

The results of this recent study were positively in conformity with Conchada and Tiongco (2015), stating that HEIs generally undergo accreditation on a per-program basis because this entails more focus on the curriculum offered per program and the implementation of such. This kind of accreditation, however, also factors in other components relevant to education, such as student services, library, alumni affairs, etc. An institution-wide accreditation focuses on the organization as a whole and how the individual academic units pursue excellence as the collective goal. Arcelo (2003) affirmed that accreditation would continue to play a crucial role in enhancing the quality of Higher Education in the Philippines. There will be greater pressure to accelerate the procedure, especially because most of the higher education programs in the Philippines are yet accredited. Corpus (2003), on the other hand, contended that accreditation is one way that HEIs keep themselves in check with the standards vis-a-vis the demand for skilled workers in the global market. Because of the huge competition among graduates in a global market, there is an urgent need to further enhance the quality of education among our HEIs.

Table 15: The relationship between the level of accreditation and OBE practices

Parameters	Value	Sig.
VMGO	18.478	.018
Faculty	15.064	.058
Curriculum and instruction	18.058	.021*
Support to students	15.982	.043*
Research	19.062	.087
Extension services	17.724	.124
Library	30.070	.000*
Physical plant and facilities	18.631	.098
Laboratories	44.919	.000*
Administration	17.211	.028*
Grand mean	23.169	.003*
Interpretation		Significant

*p<0.05

4. Conclusion

The extent of practices on the OBE implementation among HEI graduate school programs in Panay Island is very satisfactory,

especially in areas of VMGO, faculty development, curriculum and instruction, support to students, library services, physical plant, and facilities, laboratories, and administrative services. These areas have fully met 50% more than the standards, demonstrating good OBE practices in their graduate school programs. However, weaknesses are found in areas of research and extension services where some improvement is needed to fully meet the required standards. The grey areas on the extent of the practices on OBE implementation were evident in poor research outputs due to inadequate research and extension funds, resulting in weak Extension, community involvement, and poor linkages. The institutional leadership in research and extension services should be proactive and developmental in orientation. It must provide adequate and sustained budget allocation annually for the Academic Unit. The Extension and community involvement must establish a strong partnership with research since the former is the by-product of research. It involves the application of existing and new knowledge and technology and those generated in the Institution to improve the quality of life of the people. The Institution plans and implements an extension program that is need-and client based. This program should have budgetary support and other resource allocation. Budget allocation for the second primary function of SUC, the research services, and the third primary function, which is the extension services, shall be set at a higher rate of the tuition fees to achieve the evident outcomes.

The level of accreditation of HEIs has a direct bearing and significant influence on the extent of their practices on OBE implementation. HEIs shall constantly improve and set their standards above the minimum requirement in all of its ten parameter areas subject to the accreditation process. Therefore, accreditation is a practical scheme to evaluate and monitor quality program offerings among HEIs in the Philippines to maintain higher standards through OBE typology. In general, the extent of practices on the outcomes-based education implementation among HEI graduate school programs is very satisfactory. The accreditation process set by the accrediting agencies has a direct influence on its OBE practices. The findings from this study can be a basis for institutionalizing mandatory accreditation in all HEIs in the country to achieve its standards.

Compliance with ethical standards

Conflict of interest

The author(s) declared no potential conflicts of interest with respect to the research, authorship, and/or publication of this article.

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