# Assessment of the Clinical Instructors' Perspectives on Outcomes-Based Nursing Education in Region VIII

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### **Abstract**

This study assessed the clinical instructors' perspectives on Outcomes-Based Nursing Education in terms of their knowledge of Outcomes-Based Education. This determined the Problems encountered by the clinical instructors and students in the implementation of OBE and the extent of Outcomes-Based Nursing Education implementation as evaluated by the clinical instructors and students. The results showed that most of the respondents are female, belonged to the middle age adulthood, and have met the qualifications of a clinical instructor as embodied in the CMO 15, series 2017 or the policies, Standards, and Guidelines of the Bachelor of Science in Nursing Program. Generally, the clinical instructor-respondents claim that the OBE program is implemented. However, nursing students' perception differs from the perspective of their clinical instructors when it comes to the areas of OBE being implemented. In almost all indicators of the program implementation, clinical instructors have rated it higher than the ratings given by the students. Knowledge of OBE and attitude towards OBE were significant in predicting OBE implementation. This indicates that clinical instructors who know, and skills and display a favorable attitude towards OBE contribute to the successful implementation of the program.

**Keywords:** assessment, clinical instructors, Outcomes-based education, BS Nursing

## I. INTRODUCTION

Over the years nursing education has gone through educational development and reforms. reforms called for quality accountability in higher education. In the year 2012, the Philippine Higher Education shifted its paradigm from input-based to outcomesbased education where the students are the center of the teaching-learning process. Since nationwide educators have increasingly focusing their efforts on what is variously being called outcomes, results, performances, competencies, or standards in OBE.

This shift is in response to the global demands where graduates are expected to have developed professional knowledge and skills and allaround attributes to enable them to face the diversities of the job market. This poses an immense responsibility on the part of the clinical instructors.

In nursing education, the paradigm shift requires adjustments on the changing of the clinical instructors' role from experts giving input to that of the mediator or facilitator. This alters the immense responsibilities that are placed on their shoulders. Since the success of the implementation of OBE depends heavily on the direct implementers, in such cases the clinical instructors, a complete understanding and knowledge of OBE and a favorable attitude toward its implementation are vital to produce graduates who have the right competencies, values can compete anywhere in the global market.

Arquiza (2017) stated that in the Philippines, as early as 1993, the Educational Commission (EDCOM) of the Senate of the Philippines reported a mismatch between the products of the educational system and the needs of the industry, including the health sector to which nursing profession belongs.

In this scenario, the Higher Education Institutions (HEIs) were mandated to prepare their graduates to acquire the professional competencies required by both the local and global labor markets. This is the very essence of Executive Order (EO) No. 83 known as the Philippine Qualification Framework which was signed by President Benigno S. Aquino in October 2012 (PJHRD, 2015).

In response to Executive Order No. 83 and the senate report, the Commission on Higher Education (CHED) issued Memorandum Order (CMO) No. 46, s. 2012 on December 11, 2012. These policy standards which apply to private and government Higher Education Institutions (HEIs) in the country, are issued to enhance the quality assurance system of Philippine Higher Education through learning competency-based learning standards and outcomes-based system of quality assurance that is differentiated by the type of higher education institution.

Based on the guidelines for the implementation of CMO. NO.46, s. 2012, CHED Memorandum No. 15, s. 2017 or the "Policies, Standards and Guidelines for the Bachelor of Science in Nursing Program", was issued. This gives all universities and colleges offering Nursing programs to shift to outcomes-based education in the school year 2018-2019. memorandum specifies the core competencies expected of BS Nursing graduates regardless of the type of HEIs they graduate from (CMO No.15, 2017).

The implementation of outcomes-based education aims to produce graduates with high levels of academic, thinking, behavioral, and technical skills/competencies that are aligned with national academic and industry standards and needs, and international standards (CMO 46, s. 2012). A such paradigm shift is equally relevant and critical in nursing education if only

to ensure that schools produce highly competent Filipino nurses, imbued with nationalistic, professional, ethical, and moral values who will serve the country and the global community (Lacanaria, 2018).

In outcomes-based nursing education, the clinical instructors are not just experts giving inputs, they are facilitators of learning, allowing the students to play their part in constructing knowledge through experience, discussions, reflections, and other processes that promote analytical and critical thinking. Because the focus is now on students' attainment of competencies as outcomes, there is a need to observe or measure the knowledge, skills, and attitude that have been achieved (CHED, 2014). These core competencies which the students need to be developed are safe and quality nursing care, management of resources and environment, health education, legal responsibility, personal and professional development, quality improvement, research, record management, communication, collaboration and teamwork (CMO No. 14, s. 2009).

The researcher believes that for a shift in nursing education to be effective and longlasting, the clinical instructors need to view the OBE process as desirable and necessary. Since the issuance of CHED Memo No. 46, s. 2012, the Association of Deans of Philippine Colleges of Nursing, Inc. (ADPCN) took a lead in training deans and nursing faculty of the different nursing schools in different regions for a common framework of OBE implementation in the Bachelor of Science in Nursing (BSN) curriculum. However, most of the clinical instructors are still in quandary as far as implementation of outcomes-based education is concerned and some even expressed that they are not yet ready nor confident in teaching the OBE way. The gap between this "readiness" and "confidence" in teaching or implementing OBE propelled the researcher to conduct this study.

A formative evaluation, therefore, on the knowledge and attitude of the clinical instructors on the implementation of outcomes-

based education should be conducted rather than focus solely on the outcomes of the program and should be done across the program implementation not only at the end of the program. The perspective of the clinical instructors on OBE implementation is important as they are direct implementers of the new curricula. How these clinical instructors view it will either aid or hinder its successful implementation. Besides, no study has been conducted yet in region VIII along with outcomes-based nursing education. Hence, this study focuses on the assessment of the clinical instructor's perspectives on Outcomes-Based Nursing Education in terms of (1) knowledge of Outcomes-Based Education, and (2) attitude toward Outcomes-Based Education.

### II. METHODOLOGY

Region VIII is composed of Islands in the Eastern Visayas, within the central Philippines. The region is divided into six provinces: Northern Samar, Samar, Eastern Samar, Leyte, Southern Leyte, and Biliran. These provinces comprise the Eastern Visayas region. This study was conducted in the universities and colleges in the whole of Region VIII. It has sixteen (16) higher education institutions offering the nursing program. With this number, six (6) are State Universities and Colleges (SUCs) and ten (10) Private Schools.

The researcher used the mixed method with a descriptive-evaluate research design. This study described the profile of the respondents in terms of age, sex, the status of appointment, designation/position, length of service in teaching nursing course/s, level of OBE attendance in conferences, seminars, and training, highest educational attainment, and the type of Higher Education Institution where they are employed. The perspectives of the respondents in the terms of knowledge and attitude were described and evaluated as they happened during the gathering of data. Similarly, the extent of implementation of OBE was discussed and evaluated as it existed during the conduct of the study.

The results of the focus group discussions were included in the textual presentation of the

study consisted of clinical instructors and firstyear nursing students enrolled in government and private schools in Region VIII. A complete enumeration of the clinical instructors was used. For the student-respondents, Slovin's formula was used. The respondents of this study were clinical instructors who were permanent employment status. They were the faculty members of a college of nursing who conducted didactics and follow-up or supervise students in the clinical area. Another group of respondents was the first-year students. These student-respondents were chosen since they were the beneficiaries of the OBE curriculum. This study utilized four (4) parts of research questionnaires. Part I contains the demographic profile of the clinical instructors-respondents in terms of age, sex, designation, years of teaching Nursing courses, level of attendance in seminars and conferences and training, highest educational attainment, and the type of institution they are employed in. Part II contains the perspectives of clinical instructors. This is categorized into two (2): Part II-A is a researcher-made questionnaire that determined the clinical instructor-respondents' perspectives on OBE in terms of knowledge. The statements were taken from the processes and principles of OBE. Part II-B determined the attitude of the clinical instructor-respondents' toward the implementation of OBE. this was adapted from the study of Merryl Cheryne Williamson (2014) but modified to suit the local context in this study by including statements from the OBE principles and process. Manifestations for each category were measured using a range of 1-5 Likert scale. Part III contains the problems encountered by the clinical instructors in the implementation of OBE. This is a researchermade questionnaire whose items came from the study of Marilee J, Bresciani (2011). Part IV contains statements that measure the extent of OBE implementation. This is a researcher-made questionnaire in which statements were taken from literature. This was accomplished by both the clinical instructors and nursing students. The instrument used a 5-point Likert sale. This

findings of the study. The population of this

is answered both by the clinical instructors and the first-year students. Part V contains guide questions for the focus group discussion which will be conducted for the first-year students. This will determine their awareness of the outcome-based education, the extent of implementation, the problems encountered in the OBE implementation, and the availability of a remedial class.

Attitude towards Outcomes-Based Education. Respondents in the instrument for positively keyed items were scored using the scale below. For the negatively keyed items, scoring was reversed so that respondents who encircled 1 had a score of 5 while those who encircled 5 had a score of 1, and so on. The scores were classified based on the weighted mean of the respondents in all items.

These were scored and interpreted as follows:

Res	<u>sponses</u>	Score	WM Range	<u>Interpretation</u>
Stro	ongly Agree	5	4.20-5.00	Much Favorable
Ag	ree	4	3.40-4.19	Favorable
Un	decided	3	2.60-3.39	Moderately Favorable
Dis	agree	2	1.80-2.59	Less Favorable
Stro	ongly Disagree	1	1.00-1.79	Not Favorable

Initially, permission to conduct the study was sought from the office of the deans of the different colleges of nursing in Region VIII, noted by the researcher's adviser and the Dean of Graduate Studies. After the approval of the letter request, the researcher made necessary arrangements for the dates of the school visit for the actual data gathering. Questionnaires on the demographic profile, perspectives on OBE, problems encountered in the **OBE** implementation, of **OBE** and extent implementation (Part IVA) were directly addressed to the clinical instructor-respondents. On the other hand, the questionnaire on the extent of implementation (Part IVB) was distributed to the first-year student-respondents. The researcher together with her note taker conducted the focus group discussion with eight (8) first-year students. Lastly, an interview with the technical panel on nursing education from the Commission on Higher Education, Region 8 conducted to supplement students' was

responses. Issues such as the technical knowledge of faculty and problems encountered in the implementation of OBE were raised. After all the data were gathered and questionnaires retrieved, tallying interpretation, and a careful analysis was done with the help of a statistician.

## **III. RESULTS AND DISCUSSION**

clinical instructors' perspective on outcomes-based education nursing was measured in terms of knowledge and attitude towards OBE and are presented in Table 1. In terms of knowledge of OBE, the data revealed that the clinical instructor-respondents were much more knowledgeable about the processes and principles of OBE with a mean of 3.47. This could mean that the respondents know how the OBE nursing curriculum is being implemented. The respondents are very much knowledgeable in establishing high, challenging standards of performance having a weighted mean of 4.47. As cited by Killen in his study "Outcomes-Based Education: Principles and Possibilities", Spady emphasized that the teachers must establish high, challenging standards of performance to encourage students to engage deeply with issues about which they are learning. Helping students to achieve high standards is linked very closely with the idea successful learning promotes successful learning. This means that when students experience success, it reinforces their learning, builds their confidence. encourages them to accept further learning challenges.

Analysis of the data below revealed that the respondents were much knowledgeable that different teaching styles in OBE shall be adapted to a student's learning style (wm =4.02), OBE focuses on the career that a child is to pursue (wm= 3.91), the large class size in the schools will not hinder in the successful implementation of OBE (wm = 3.86), Clinical instructors must strive to provide expanded opportunities for all students so that lessons shall be done as scheduled (wm = 3.79), a program outcome is what a student can do as a result of a learning experience(wm=3.72). In

OBE students can play an active role in developing part of their learning (wm = 3.66), giving a failing grade to students will be much easier in OBE if he has not achieved the learning outcomes (wm = 3.44). This result conforms to the study of Killen. He mentioned that the faculty should know that OBE is underpinned by basic premises that all students can learn and succeed, but not all at the same time or in the same way. Clinical instructors must provide remedial classes and extend the time for the students to be able to master the concept/activities. Mamary in his discussion of OBE argues that the role of schools is to find ways for students to succeed, rather than finding ways for students to fail. All students have talent, and it is the job of schools to develop it.

Although the overall data on the knowledge of OBE resulted in a much more knowledgeable result, there are important premises and principles in OBE gained that only knowledgeable results. the respondents were only knowledgeable that: clear guidelines are given to how students can be transformed from passive to active learners (3.33), the role of the teacher in OBE is a transmitter of information, passing on facts and rules to students (3.29), OBE is more likely to develop fulfilled human beings than in the former educational system (3.17), all the OBE classroom activities should

be first be known so that the chosen outcome can be achieved (2.98), OBE will provide all students with equal educational opportunities (2.97), in OBE everything that teachers do must be focused on what they want students to know, understand and be able to do (2.80), and the OBE curriculum design must start with a clear definition of the intended outcomes that students are to achieve by the end of the program (2.72). These findings mean that the respondents cannot fully accommodate OBE concepts such as outcomes, premises, principles, and assessment standards in their classroom practices. It can be inferred that the most important reason for using OBE is to promote the effective use and integration of various teaching and learning strategies by the educator, as well as the learners, which is not fully known by the respondents. According to Macatangay (2013),proper teaching methodology and classroom management are very important factors in the successful learning of the students. With OBE, all nursing students are provided with a learning environment that will cater to their development to achieve their aims and goal. OBE challenges the students to be more competitive. it aspires to transform students into well-educated graduates who are experts in their profession who possess Filipino family values with qualities desired for the welfare of the country and the world.

**Table 1.** Knowledge in OBE of the clinical instructors in Region VIII

Knowledge	WM	Interpretation
Clinical instructors should establish high, challenging standards of performance.	4.47	Very Much Knowledgeable
Different teaching styles in OBE shall be adapted to a student's individual learning style.		Much Knowledgeable
OBE focuses on the career that a child is to pursue		Much Knowledgeable
The large class size in the schools will of hinder in a successful implementation of OBE		Much Knowledgeable
clinical instructors must strive to provide expanded opportunities for all students so that lessons shall be done as scheduled.		Much Knowledgeable

A program outcome is what a student can do as a result of a learning experience.	3.72	Much Knowledgeable
In OBE students can play an active role in developing part of their learning.	3.66	Much Knowledgeable
Giving a failing grade to students will be much easier in OBE if he has not achieved the learning outcomes.	3.44	Much Knowledgeable
In OBE clear guidelines are given as to how students can be transformed from passive to active learners.	3.33	Knowledgeable
The role of the teacher in OBE is a transmitter of information, passing on facts and rules to students	3.29	Knowledgeable
OBE is more likely to develop fulfilled human beings than in the former educational system	3.17	Knowledgeable
all the OBE classroom activities should be first be known so that the chosen outcome can be achieved	2.98	Knowledgeable
OBE will provide all students with equal educational opportunities	2.97	Knowledgeable
In OBE everything that teachers do must be clearly focused on what they want students to know, understand and be able to do	2.80	Knowledgeable
The OBE curriculum design must start with a clear definition of the intended outcomes that students are to achieve by the end of the program	2.72	Knowledgeable
Mean	3.47	Much Knowledgeable

Attitude Towards OBE. The attitude of the clinical instructor –respondents toward OBE is shown in Table 2.2. Based on the data gathered the respondents had a moderately favorable attitude towards OBE with a grand mean of 2.61. This is quite low considering that clinical instructors should possess much favorable attitude towards the program if the success of OBE implementation is the primary goal.

As gleaned from the table, the clinical instructor –respondents had a much more favorable attitude toward the following principles of OBE: outcomes-based education Curriculum is not as important as other innovations in the educational system (3.86), and I enjoy the challenge presented in the implementation of the Outcomes-Based Education (3.53), and I can see much importance in the implementation of the Outcomes-Based Education (3.47). It can be inferred from these findings that the

respondents recognized the need to adapt to the educational reform or the paradigm shift. Cohen as cited by Hoffman (2009) argues that educators and their trainers should get into their bloodstream that they can't get learners to change their behaviors unless they know what change they want and what outcome they seek. The data also revealed processes that the respondents' rated moderately favorable attitudes towards them. These are: I do a lot of subject-related reading to improve knowledge and understanding of approaches (2.77), the time allotment per subject gave way for me to improve my teaching strategies (2.68), I like the Outcomes-Based Education system because it deals with the practicality n the teaching-learning process (2.62). This result showed that the respondents are trying to increase awareness, knowledge, and understanding of OBE in their pursuit. The

quality of OBE nursing curriculum implementation requires not just knowledge of the educational process, and mastery of the instructional methods, but most importantly the ability of the clinical instructors to appreciate the shift in the educational system.

On the other hand, those processes which the respondents have a less favorable attitude toward them are: they think the Outcomes-Curriculum Education manageable (2.49), I enjoy my teaching career since the Outcomes-Based Education was implemented (2.44), I am so motivated to do teaching-related tasks in OBE (2.33), I am tired of getting information on the advantages that the Outcomes-Based Education Curriculum may impart to my styles of teaching (2.19), I am tired of getting information on the advantages that the Outcomes-Based Education Curriculum may impart to my styles of teaching (2.19), I like the formerly implemented curriculum more than the OBE Curriculum (2.18), The implemented of the Outcomes-Based Education makes me exhausted in thinking different teaching methodologies (2.18), Outcomes-Based Education is difficult to implement because it is complicated (2.11), I find it difficult to teach and learn with the OBE framework (2.00).

It can be inferred from the findings that clinical instructors need to apply a variety of teaching strategies to allow learners to demonstrate the learning objectives. They should therefore develop a much more favorable attitude towards the OBE process while learners provide outputs.

Hoffman (2009) argued that educators should develop a "feel for process" and "learning to get better at change". As stated by Ortega (2016) in her study, educators should be challenged to engage and act as learners' facilitators rather than as conveyors of knowledge and information to adapt to the new paradigm in education. She opined that this could lead to the development of certain attitudes amongst educators. How these clinical instructors think and act toward OBE will either aid or hinder its successful implementation.

Table 2. Attitude Towards OBE of the clinical instructors in Region VIII

Attitude	Weighted Mean	Interpretation
Outcomes –based education Curriculum is not as important as other innovations in the educational system	3.86	Much Favorable
I enjoy the challenge presented in the implementation of the Outcomes-Based Education	3.53	Much Favorable
I can see much importance in the implementation of the Outcomes-Based Education	3.47	Much Favorable
I do a lot of subject-related reading in order to improve my knowledge and understanding of OBE approaches	2.77	Moderately Favorable
Time allotment per subject gave way for me to improve my teaching strategies	2.68	Moderately Favorable
I like the Outcomes-Based Education system because it deals with the practicality n the teaching learning process	2.62	Moderately Favorable
I Outcomes-Based Education Curriculum is more manageable	2.49	Less Favorable
I enjoy more my teaching career since the Outcomes-Based Education was implemented.	2.44	Less Favorable

I am so motivated to do teaching-related tasks in OBE	2.33	Less Favorable
I consider the Outcomes Based Education Curriculum as the most appropriate innovation in the Philippine educational system	2.29	Less Favorable
I am tired of getting information on the advantages that the Outcomes-Based Education Curriculum may impart to my styles of teaching	2.19	Less Favorable
I like the formerly implemented curriculum more than the OBE Curriculum	2.18	Less Favorable
The implemented of the Outcomes-Based Education makes me exhausted in thinking different teaching methodologies	2.18	Less Favorable
Outcomes-Based Education is difficult to implement because it is complicated	2.11	Less Favorable
I find it difficult to teach and learn with the OBE framework	2.00	Less Favorable
Mean	2.61	Moderately Favorable

## Relationships between the Clinical Instructors' Perspectives on OBE and Extent of OBE Implementation

relationships between the clinical instructors' perspectives and the extent of OBE were tested implementation using Multiple Regression analysis and are presented in Table 3. Based on the computed value with a 0.05 margin of error, the perspective on OBE in terms of knowledge and attitude significantly predicted OBE implementation. respondent's knowledge of OBE (β=0.577, p<0.05) and attitude towards OBE ( $\beta$ =0.608, p<0.05) were significant in predicting the extent of OBE implementation having significance values both less than the 0.05 margin of error. This indicates that the perspectives on OBE of the clinical instructors which are the knowledge and attitude will influence the extent of OBE implementation. Therefore, the null hypothesis is rejected.

It can be inferred that if the clinical instructors have very high knowledge of OBE and show a much more favorable attitude towards OBE, successful implementation of the program will be achieved. This finding is similar to the conclusion of Malan (2000) that

implementation of OBE depends largely on the knowledge attitude and of Furthermore, this finding shares similarities with that of Davis (2013) who stated that the educational outcomes on the right preparation of teachers and educational strategies, the teaching methods, the assessment procedures, and the educational environment are made in the context of the stated learning outcomes. Teachers should consider their behavior towards the program, teaching methods, educational strategies, and time allocated, in terms of the learning outcomes achieved by the course. It should be made explicit to the learning outcomes and overall implementation of OBE.

It can be inferred from the findings that outcome-based education is an approach to the teaching-learning process in which the success of its implementation is driven by the knowledge and attitude that the clinical instructors should display and the outcomes that students achieve at the end of the course.

CI Perspectives on OBE	Parameters	OBE Implementation
	Beta	0.577
Knowledge on OBE	Sig.	0.000
	Interpretation	Significant
	Beta	0.608
Attitude towards OBE	Sig.	0.007
	Interpretation	Significant

 Table 3. Relationships between the Clinical Instructors' Perspectives and Extent of OBE

 Implementation

## IV. CONCLUSION

In Region VIII nursing education, the clinical instructors are qualified to teach the outcomesbased nursing curriculum considering the qualification standards stipulated under CMO 15, s. 2017 regarding their educational attainment and clinical practice. However, for OBE to be successfully adopted by tertiary education, the academic staff and the students must understand the objective of learning and the roles of both instructors and learners. The clinical instructors have much knowledge of OBE and have a moderately favorable attitude towards it. This implies that the clinical instructors have the potential to implement the OBE in the right way. Implementation of OBE depends largely on the knowledge and attitude of teachers which contribute to the learning outcomes and overall implementation of OBE. It demands a strong institutional commitment to continuing the professional development of its faculty to better serve its major stakeholders, the learners. With a strong determination combined with collaboration and harmony among human and material resources, indeed successful implementation of OBE will reach far beyond anyone could imagine.

## **REFERENCES**

 Aranda, J. P. (2016). Designing professional program instruction to align with students' cognitive processing. Currents in Pharmacy Teaching and Learning Retrieved researchgate.net on February 8, 2019.

- Arquiza, G. S. (2019). Towards An Outcomes-Based Education Curriculum lit cited in introduction chapter I, A Philippine Higher Education Experience, 2017 retrieved at sigma.nursing repository.org on February 8, 2019.
- 3. Borsoto, L., Lescano, M. (2014). Status of implementation and usefulness of outcomes-based education in the engineering department of an Asian University. International Journal of Multidisciplinary Academic Research, 2 (4):154-166.
- Bradshaw, Martha J., Beth L. Hultquist. (2017). Innovative Teaching Strategies in Nursing and Related Health Professionals, 7th ed. World Headquarters Jones& Bartlett Learning 5 Wall St., Burlington, MA 01803.
- Cheng, Y. C. (2014). Effectiveness of Outcomes-Based Education in school: An organizational perspective. International Journal of Educational Management, 8(3),26-34.
- 6. Cohen, R. and Hyman-Cohen. (2012). Factors affecting the engineering students' performance in the OBE assessment examination in mathematics, International Journal of Academic Research in Progressive Education and Development, 3(2),87-103.
- Custodio, P. C., Espita, G. N., Siy, L.C. (2017). The Implementation of outcome-based education: the case of the University of Perpetual Help System Dalta LasPiñas Campus. University of

- Perpetual Help System DALTA Las Piñas, Manila, Philippines.
- 8. Davis, M. H. (2003), Outcome-Based Education. Journal of Veterinary Medical Education, 30(3):258-263.
- 9. De Jager HJ, Nieuwenhuis FJ. (2015). Linkages between total quality management and the outcomes-based approach in education environment. Qual High Educ, 11: 251-60.
- 10. Dearmon, Valorie. (2013). Evidence-Based nursing education: effective use of instructional design and simulated learning environments to enhance knowledge transfer in undergraduate nursing students. Journal of Professional Nursing, 29(4).
- 11. Du Toit, R. (2004). Meaning and acquisition in educational settings. USA: University Press of America.
- 12. Embo M, Driessen E, Valcke M, van der Vleuten CPM. (2015). Integrating learning assessment and supervision in a competency framework for clinical workplace Education. NurEduc Today, 35:341-6.
- 13. Epstein R M. (2007). Assessment in medical education. Engl J Med, 356: 387-96.
- 14. Giessen-Hood C. (2013). Teacher's attitudes towards the implementation of Outcomes Based Education (OBE) in South Africa. Unpublished Master's Thesis. University Of the Witwatersrand.
- 15. Gruppenbi LD. (2012). Outcome-Based medical education: implications, opportunities, and challenges. Korean J Med Educ, 24:281-5.
- Gulick, L., Urwick, L. (1997). Papers on the science of administration. New York, NY: Institute of Public Administration.
- 17. Harden R M. (2007). Outcome-Based Education: The future is today. Med Teach, 29:625-9
- 18. Holborn M. (2013). Economics and education, budgeting, and financing, sociology themes and perspectives. Harper Collin Publishers Ltd. London.

- 19. Hoffman, Timothy Gene (2009). An examination of outcome-based education practices, standards, and factors that implementation of OBE. Published Enhance Dissertation. Iowa State University.
- 20. Jacolbia M. L. (2012). Background on the Study on outcomes-based education in the Philippines.
- 21. Killen, D. (1998). An Australian perspective on outcome-based education. Keynote Address at the International Symposium on Outcomes-Based Education. Pretoria: Vista University.
- 22. Kilpatrick, J. (2009). The mathematics teacher and curriculum change. PNA, 3 (3), 107-121.
- 23. Kim HS (2012). Outcomes-Based curriculum development and student evaluation in nursing education. J KoreanAcadNurs.Dec2012retrieved@nc bi.nlm.nih.gov/pubmed,February 9, 2019.
- 24. Kini, Tara and Anne Podolsky (2012). Teaching experience teacher https://www.aft.org/ae/fal12016.
- 25. Kirkpatrick, D. L. (1994). Evaluating training Programs: the four levels. San Francisco: Berrett-Koehler.
- 26. Lixun, w. (2011). Designing and implementing outcome-based learning in a linguistics course: a case study in Hong Kong. Procedia Social and Behavioral Science, 12:9-18.
- 27. Magno, J. (2014). Knowing what students know and can do: the current state of student learning outcomes assessment. Philippine Educational Measurement and Evaluation (PEMEA).
- 28. Malcolm, G. (2000). The influence of testing on Curriculum in Understanding Outcomes-Based Education. Johannesburg: S.A.1.D.E.
- 29. Miller, Lisa M. Soederberg. (2009). Age Differences in the effects of domain knowledge reading efficiency published in final edited form as: Psychol Aging, 24(1):63-74.

30. Morcke A M, Dornan T, Eika B. (2013). Outcome (competency) based education: an exploration of its origins, theoretical basis, and empirical evidence. Advanced Health Science Education, 18:851-863.

- 31. Olivier, C. (2008). How to educate and train outcomes based. Pretoria: J.L. Van Schaik Publishers.
- 32. Ornstein, C. A., (2014). Outcomes-Based education: foundations, principles, and issues (4th ed.). Boston: Pearson Education.
- 33. Orsmond, Gary and Gildenhuys, J. (2005). Assessment of interest as subjective personal data of engineering freshmen towards their enrolled degree program, International Journal of Academic Research Progressive Education and Development, 3(1):195-207.
- 34. Ortega, RA A. and Ruth A. Ortega-Dela Cruz. (2016). Educators' Attitude towards outcomes-based educational approach in English second language learning. American Journal of Educational Research, 4(8).
- 35. Oreta, A.W. C. and Roxas, C.L. C. (2012). Implementing outcomes-based framework in the teaching of engineering International mechanics (statics). Conference Civil Engineering on Education. Nov. 9-10, Dela Salle University, Manila Philippines retrieved at www.researchgate.net on May 5, 2019. 2012
- 36. Smit, M. K. (2001). Beyond Traditional Outcome-based education. Educational Leadership. 46 (2): 67-72.
- 37. Spady, William (2004). Outcome-based education: critical issues and answers. Arlington Virginia: American Association of School Administrators. ISBN 0876521839.Retrieved December 11,2018.
- 38. Stanley, Mary Jo C., Jacalyn P. Dougherty. (2010). A paradigm shifts in nursing education: a new model nursing

- education perspective, November-December, 31(6):378-380.
- 39. Tan,Katherine, et. Al. (2019). The effectiveness of outcome-based education on the competencies of nursing students: a systematic review. Nurse Education Today, May 2018, 64:180-189.
- 40. Valizadeh, Susan. (2009). The effect of outcome-based education on nursing student's clinical competency. Iranian Journal of Medical Education, 9(2):157-166.
- 41. Van der Horst, H. & McDonald, M.E.W. (2007). Outcomes based education, a teacher's manual. Pretoria: Kagiso Publishers, 68-72.
- VlasceanuL, Grünberg L, Parlea D. (2014). Quality Assurance and accreditation: A Glossary of Basic Terms And Definitions. Bucharest: UNESCO CEPES: 2014.
- 43. Williamshon, Merryl Cheryne. (2000). A comparative analysis of outcomes-based education in Australia and SouthAfrica. Master's Thesis. University of South Africa.
- 44. CMO. No. 46, s. 2012. "Policy-Standard to Enhance Quality Assurance (QA) in Philippine Higher Education through an Outcomes-Based and Typology-Based QA"
- 45. Policy-Standard Guidelines (PSG) for the Bachelor of Science in CHED Memorandum No. 15, s. 2017. Policies, Standards and Nursing Program
- 46. CHED (2014). Hand book on Typology, Outcomes-Based Education, and Institutional Sustainability Assessment. CHED 2014.