Development and Validation of OBE-based Syllabus Evaluation Tool

Roar A. Callaman [1]
ORCID No. 0000-0003-3241-9300

Abstract

This study describes the development and validation of an evaluation tool to measure the quality of OBE-based syllabi and their compliance with flexible learning. This tool made used of two-stage approach. In the development stage, the items were carefully generated based on the answers from the experts. The instrument was then examined by validators to review the items, including content and language. Thus, a 17-item evaluation tool was developed. In the validation stage, the tool was pilot tested to 49 respondents and found to have a good level of reliability. The results of the construct validity using EFA with 288 respondents from the HEIs faculties in the region showed that the scale has two factors. The performance criteria were composed of 10 items, while there were seven (7) items in the teaching-learning process component. The interplay between performance criteria and teaching-learning process indicators could be used to ensure the quality of the flexible learning-compliant OBE-based syllabi. Thus, confirmation of the structure of the developed evaluation tool is recommended.

Keywords: OBE-syllabus evaluation tool, flexible learning, research instrumentation, exploratory factor analysis

Teaching and learning in the 21st century is undergoing a paradigm shift in expectations for how curriculum development and delivery is approached, mainly since the COVID-19 pandemic has paved the way for a revolution in education that meets the requirements of the current situation. Commission on Higher Education (CHED) Memorandum Order number 4 series of 2020 provides guidelines for flexible learning implementations that call for innovative learning modalities that facilitate the transition from traditional to flexible learning. Flexible learning can be argued to persist in the presence of a pandemic and beyond. CHED Commissioner de Vera says there would be no return to old teaching methods. This means that institutions should move with the times in terms of educational development (Mangali, Biscocho, Salagubang, & Del Castillo, 2019).

Given the viewpoints above, outcomes-based education has emerged as a crucial strategy for changing course delivery (Guo, Wang, & Chen, 2017). OBE mandates using various evaluation techniques to accurately measure students' learning in a blended classroom environment (Fu & Shang, 2021). With this, it is thought essential to consider the syllabi's quality.

The evaluation instruments for syllabi

[1] University of Southeastern Philppines

in Region XI HEIs are generally in the form checklist that measures the compliance of syllabi with the OBE framework. These checklists pertain to the presence or absence of a specific part of OBE-based syllabi. Such limiting features of the existing instruments do not look into the quality of the syllabi or the extent of its compliance with OBE.

In line with this, there is a need to create an instrument that would measure the quality of OBE syllabi and the integration of flexible learning. Hence, this study aimed to develop and validate an OBE syllabus evaluation tool focusing on these two considerations.

Literature Review

An outcome is a demonstration of learning (Spady, 1993) which is what students should be able to do by the end of the period. Outcome-based education is, therefore, an approach to education in which curricular decisions are driven by the learning outcomes that students should obtain at the end of the course. Harden, Crosby and Davis (1999) suggest that the product defines the process in outcome-based education. This can be summarized as outcome-based thinking, as opposed to input-based education, where the educational process is focused, and all outcomes are appreciated.

Furthermore, it encourages the teacher and the student to share responsibility for learning and can guide student assessment and course evaluation. What outcomes should be covered in a curriculum, how should they be assessed, and how should outcome-based education be implemented are issues that need to be addressed (Harden, 1999).

With the above premise, Burger (2008) emphasizes that OBE is a paradigm shift for most teachers as it is a departure from the content-based, test-driven traditional curriculum they were trained to teach. In contrast to the former curriculum, OBE focuses on what learners know and can do. Therefore, the starting point of any outcome-based curriculum or lesson is not the learning content, but rather the intended learning results, i.e., the knowledge, skills, and values expected from learners. As a result, learning curricula and lesson plans are implemented to facilitate learners to achieve the desired results. Meanwhile, valid and reliable assessment approaches help teachers justify whether learners have achieved the expected outcomes.

However, Lam and Tsui (2016) reiterate that successful implementation of OBE demands high cost and standard of student learning outcomes and active involvement of stakeholders- students, faculty, employers, parents, and others. Despite the high price, OBE offers students the opportunity to develop employability skills.

This is why the Ministry of Education, Science, Vocational Training, and Early Education (MESVTEE) did not only revise the school curriculum, but also revised the teacher education curriculum in 2013 and rolled out the revised curriculum for Junior Secondary School Teacher Training Colleges (JSSTTC) in 2016. Notable among the innovations was the paradigm shift from objective-based education to outcomes-based education (OBE). It was envisioned that teacher educators would change their practices by designing activities that were outcomes which engaged learners in lessons that incorporate learner-centered methodologies (MESVTEE, 2013). Consequently, Rong (2021) holds the opinion that the need for universities to establish teaching objectives that should focus on students' outcomes, build a rich teaching system, carry out enriching

teaching activities, and establish a diverse and dynamic developmental evaluation system.

In course syllabus design, Biggs and Tang (2007) proposed the concept of constructive alignment in the light of OBE that assumes that learning objectives, assessment methods, and teaching and learning activities are intentionally aligned so that learning outcomes can be achieved. More specifically, designing a course starts with the teachers planning the intended learning outcomes in terms of students' knowledge, skills, values, and attitudes at the end of the learning process. All these expected outcomes then serve as the basis for teachers to select suitable teaching and learning activities and tasks to assess. The report on students' performance through assessment will reveal the learners' level of achievement of expected outcomes. This level will also be used to plan the following teaching objectives and review the existing teaching, learning and assessment practices.

Practices of designing English program syllabi without considering local factors such as students' levels and learning styles, expected graduates' attributes, employers' needs, the rush coverage of inauthentic textbook contents, and students' insufficient self-studying competencies had impeded graduates from achieving the compulsory expected outcome language proficiency as stated in Document 758/TB-DHTN (TNU Project, 2013). Also, the lack of explicit discussion of OBE with the students may have denied students the ability to make fully informed evaluations of OBE innovations. Implications for instrument validation and evaluation of initiatives in an OBE context are discussed, as is the broader issue of transparency in teacher education curriculum design and implementation (Deneen, Brown, Bond, & Shroff, 2013).

In a study of the level of awareness of OBE, Caguimbal et al. (2013) concluded that all participants are well aware that OBE is beneficial to students and the community. Therefore, to successfully shift from traditional to OBE programs, it is urgent that educators, particularly syllabus designers, should be equipped with a clear understanding of the approach so that they can restructure the programs according to OBE standards.

Indeed, it was necessary to establish the lecturers' understanding of the OBE education syllabus and how they had changed their practices to incorporate OBE premises and principles in their teaching. This was so because the curriculum intent might not always be put into practice by the implementers due to various reasons. Because of this, Waxman (2001) stated that the discrepancy between what a curriculum proposal means to its designers and what it means to the teachers being asked to use it was a common and continuing problem in curriculum implementation.

What Waxman (2001) suggested was that the implementation of a curriculum largely depends on the implementers' understanding of the innovation; it was not a guarantee that the curriculum intent would be put into practice as it was. The implementers (teachers) adapt the curriculum to suit their feelings, opinions, and school environment, which might lead to deviation from the expected norm. Principally, without focusing on lecturers' practices as they educate teachers under the OBE paradigm, it would be problematic to ascertain whether the teachers who were churned into the schools understand teaching and learning under the new paradigm-OBE.

Thus, Mulenga and Luangala (2015) argue that conducting a job analysis can help teacher educators develop skills and

knowledge that teachers need to perform well. As a result, students will be able to perform well in their jobs in the future as there is a definite impact of instruction, active learning, and formative assessment on student's learning outcomes, especially as performance assessment is known as a unique method which increases the students' attention towards education (Chan, 2016).

Research Objectives

1. Develop an OBE-based syllabus evaluation tool; and
2. Validate the tool by evaluating its construct validity and reliability

Framework

This study is anchored on the OBE theory of Spady (1994), a leading expert in OBE who pointed out that "outcome-based education means organizing teaching activities based on expected outcomes to achieve the expected results." To be specific, this means starting with identifying learners' expected outcomes, then organizing teaching and learning as well as assessing the effectiveness of the learning process. He also stated that outcome-based education is designed so that all students are equipped with the necessary knowledge, skills, and qualities to succeed after graduation.

In addition, Article III Section 12 of CHED Memorandum Order no. 46 series of 2012, which is the Policy-Standard to Enhance Quality Assurance (QA) in Philippine Higher Education through an outcomes-based and typology-based QA, stated that learning throughout life is the key in the globalized world of the 21st century to help individuals "adapt to the evolving requirements of the labor market" and better master "the changing time-frames and rhythms of individual existence." UNESCO's 1996 Delors Report asserted that lifelong learning "must constitute a continuous process of forming whole beings-their knowledge attitudes, as well as the critical faculty and ability to act. It should enable people to develop an awareness of themselves and their environment and encourage them to play social roles and work in the community".

This rationale follows the quality assurance framework of CHED, as it defines quality as the alignment and consistency of the learning environment with the institution's vision, mission, and goals demonstrated by exceptional learning and service outcomes and the development of a culture of quality. This definition highlights three perspectives of quality (Green, 1993); firstly, quality as "fitness for purpose" is generally used by international bodies for assessment and accreditation. This perspective requires translating the institution's vision, mission, and goals into learning outcomes, programs, and system. Second, quality as "exceptional" means either being distinctive, exceeding very high standards or conformance to standards based on a system of comparability using criteria and ratings. The third characteristic underlies CHED's definition of "exceptional." Quality as "developing a culture of quality" is the transformational dimension of the CHED notion of quality.

Methodology

Design and Methods

This study used both developmental and descriptive design since it involves tool development and then the collection of data that provides an account or description of individuals, groups, or situations. However, in the development phase, the qualitative data were utilized in the data gathering procedure following scale development. The

process follows the suggestion of DeVellis (1991). This instrument development was deductive. It started with determining what to measure. It used interview questions to elicit ideas and perceptions on measuring the quality of the OBE syllabus with its conformance to flexible learning. Meanwhile, in the validation phase of the study, quantitative research methods were utilized.

Figure 1 shows the procedural framework of the study. This study made use of an input-process-output (IPO) framework. The researcher conducted an analysis of the existing OBE syllabus evaluation checklist, OBE syllabus and a literature review on the fundamental concepts of the OBE syllabus and flexible learning. This served as the baseline data in the development of the instrument. The processes include key informant interviews (KII), focus group discussions (FGDs), pilot testing, survey administration, and analyses on validity and reliability.

Locale

This study was conducted in Region XI, specifically in the different private and public higher education institutions in Davao Region. The participants of this study came from the selected HEIs in the region.

Participants

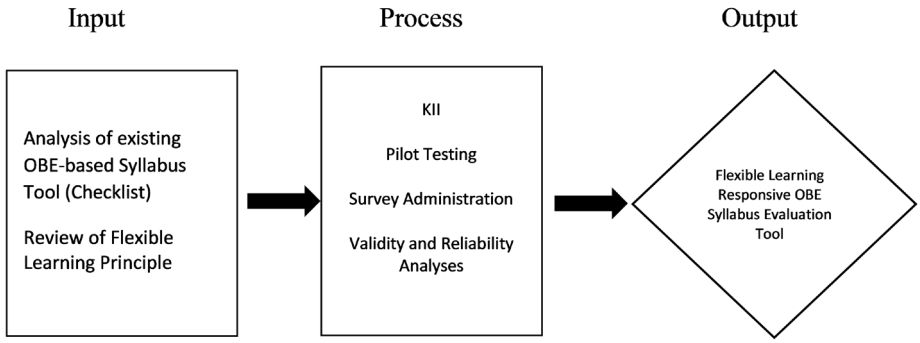
Experts in outcome-based education and flexible learning were chosen to be the study participants in the development stage of this study. Participant 1 was a program head of a leading university in the region. Participant 2 was a former quality assurance and research head from a private university. Participant 3 was a former VPAA of a local college and a member of the research ethics board of an autonomous private HEI in the region. Participant 4 was a technical panel member in Teacher Education of CHEd Central Office and a former dean of the college of education.

Meanwhile, the respondents of the validation phase were the 288 faculty members who were purposively selected from different public and private colleges and universities in the region. According to Breckler (1990) and Goldstein (2006), there must be a minimum of 200 samples in conducting EFA.

Sampling Procedure

Purposive sampling was used to identify the participants of this study. According to David (2002), purposive sampling is a non-probability sampling in which the investigator uses a specific purpose in selecting a sample.

Figure 1. *The Process of the Study Describing the Operational Model Used*



Instruments

The development phase of the study used a semi-structured interview guide questions to elicit information from the research participants. While in the validation phase, the evaluation tool served as the instrument for the student. The tool was composed of 17-item statements that would measure the quality of the syllabus and its conformance to flexible learning.

Research Procedure

This research focuses on developing and validating an instrument to assess the OBE syllabus's conformance to flexible learning principles. The *development phase* of this study undertook the following procedures: The letter request was sent to the experts. After securing the approval, the experts reviewed the OBE and flexible learning guideline/s and standards. Then, the key-informant interview was conducted using the interview guide questions. The recorded responses from the experts were transcribed and coded for the content and thematic analysis. The identified key themes were the basis for formulating the items/statements supported by the literature. After this step, the developed tool was subjected to content validity.

In the *validation phase*, the process started after securing approval to conduct the pilot testing; the tool was pilot tested on 49 teachers who were not the respondents of the study. This step was done to determine the internal consistency of the instrument's items. After establishing the tool's reliability, the researcher secured approval to conduct the study. The evaluation tool was then administered to the 285 HEIs faculty members in Davao Region through Google forms within a week. Then, the gathered data were collated, tabulated, and organized for statistical analysis.

Data Analysis

Thematic analysis was utilized to generate themes from the responses of the research participants in the development phase. The researcher employed a series of steps in scale development to facilitate statistical quantitative data analysis. It included the determination of Cronbach's alpha for reliability analysis. Moreover, exploratory factor analysis was also conducted to explore the constructs of the developed evaluation tool.

Ethical Considerations

All the participants were given an informed consent form and asked to sign and date once they had agreed to participate in the study. The documents provided contained relevant information about the study. There were no other questions far from the purpose of the study besides the prepared queries. Participants were also guaranteed privacy and confidentiality, so their names would not be used; instead, a pseudonym was given to them and were used even during the interview.

Meanwhile, before the respondents could answer the evaluation tool through Google forms, a decision button was provided if the respondents agreed to take part in the study. The 285 respondents were assured that their participation was voluntary and free from threat or prejudice.

Results and Discussion

Development of Syllabus Evaluation Form

The development phase started with informal virtual interviews, given the current health crisis. Guided by the interview questions, the researcher propounded the main and probing questions related to the

subject under study. After the transcription, the researcher familiarized himself with the data and identified significant common statements among the experts.

Constructive Alignment. The following information was recurring from the data analysis of three to four experts. These were evident in the following statements. For item 1 these were the statements from the experts:

> Expert 1: *"Syllabi must provide what the learners are expected to do."*
> Expert 3: *"Question: what do students need to know and do?"*
> Expert 4: *"Syllabi must identify what they need to know or do."*

Moreover, the researcher also noted the following statements, which led to the formulation of the second item.

> Expert 2: *"Also consider alignment."*
> Expert 3: *"Are the outcomes aligned?"*
> Expert 4: *"The syllabus must show constructive alignment with the educational objectives."*

Furthermore, the following statements were the bases of the third statement:

> Expert 1: *"Some syllabi provide broad learning outcomes. That should not be."*
> Expert 2: *"Always make your learning outcomes specific."*
> Expert 3*: "If the learning outcomes are specific, the direction is clearer."*

Learning Outcomes. Regarding the fourth item, the participants mentioned the need for the learning outcomes to be measurable. This was reflected in the following statements:

> Expert 4: *"You cannot include an outcome that is vague and with no measure."*
> Expert 3: *"Rubrics and measurement systems must be included, so we will know whether the outcome is achieved or not."*

For items five and six, the participants mentioned the importance of confirmable performance tasks and workloads to be realized in flexible learning. They said:

> Experts 3, 4: *"How do you measure outcomes? Through confirmable tasks"*
> Experts 2, 3: *"Give students workloads. State the outcomes in flexible learning set up."*
> Expert 1: *"Learning outcomes must be translated to workloads."*

Teaching Activities. As to the teaching and learning process for items 7-9, participants mentioned that the teaching activities must be:

> Experts 1, 2, 4: *"Synchronous and asynchronous."*
> Experts 3, 4: *"With time frame"*
> Expert 1: *"Time frame based on the complexity"*
> Expert 2: *"It should be challenging but not overwhelming."*

Assessment. The four experts also mentioned the importance of the availability of resources and the context that is to be provided in each course. As to assessment, the participants said:

> Experts 2, 3, 4: *"The syllabus should show rogression towards meeting important components of the work*

being completed, critiqued or assessed"

Experts 1, 3: *"Assignment weights for the learning evidence and assessment must depend on the complexity."*

Experts 2, 3, 4: *"Varied submission platforms for assessment tasks."*

Experts 1, 2, 3: *"Constructive alignment from intended learning outcomes with teaching-learning activities and outcomes-based assessment."*

These statements are consistent with the work of Guskey (1994), Kirk and Welborne (1992), and McNeir (1993). These studies argue that learning outcomes should be clear and observable demonstrations of student learning after a series of learning experiences. They are not values, attitudes, emotions, beliefs, activities, tasks, goals, achievements, etc., as most people think. These demonstrations or performances typically reflect three things: (1) what the student knows; (2) what students can do with their knowledge; and, (3) the students are confident and motivated to demonstrate what they know.

The perceptions from the four experts (program head, QA head, VPAA, and a CHED Central technical panel member in Teacher Education) in OBE and flexible learning were gathered and collated, of which 16 items were generated to evaluate the syllabus as seen in Table 1.

To ensure the content validity of the tool, four experts (faculty, dean, college president, and language expert) were invited to review the content and the language used. Their feedback was utilized to revise the tool. The developed syllabus evaluation tool is now composed of 17 items.

Table 1

OBE-based Syllabus Evaluation Tool

Statement
1. The syllabus provides what learners are expected to know and be able to do at the desired level of competence.
2. The course outcomes are aligned with the program's educational objectives.
3. The intended learning outcomes are specific.
4. The intended learning outcomes are measurable.
5. The intended learning outcomes are confirmable through performance tasks and workloads.
6. The intended learning outcomes are phrased to be realized in flexible learning.
7. The teaching-learning activities include both synchronous and asynchronous modality.
8. The time frame for teaching learning activities depends on their complexity.
9. The course appears to be challenging but not overwhelming.
10. The syllabus provides a list of required and supplementary materials from various sources.
11. The syllabus invites students into the course and subject matter by providing context.
12. The syllabus shows progression towards meeting essential components of the work being completed, critiqued, or assessed.
13. The syllabus provides a clear explanation of the evaluation of the assessment process and measurement.
14. The assignment of weights for the learning evidence and assessment activities depends on their complexity.
15. The syllabus provides varied submission platforms for assessment tasks.
16. The syllabus shows a constructive alignment of intended learning outcomes with teaching-learning activities and outcomes-based assessment.

Once the items were presented, another group of experts presented their comments which were then incorporated to improve the items generated:

Expert B-CP: *"I would like to suggest the following: (1) revise item 9 and (2) provide item/s exploring the nature and availability of references."*

Expert C-Fac: *"May consider elaborating the meaning of ng"*

in item 9."

Expert D-LE: *"Since this evaluation tool includes integration of flexible learning, kindly provide the addition item(s) that would include something related to (a) utilization of various online tools in the delivering of online/synchronous teaching-learning process; and (b) varied online teaching-learning activities address different learning styles."*

Expert A: *"May consider providing the cite(s) leading to the evaluation if the syllabus provides teaching-learning activities that integrate the UN SDG."*

Expert B-CP: *"May consider arranging the statements according to the evaluated area, if possible."*

From the preceding statements, the items were improved, removed, and added. From 16 items, the revised items became 17 with the removal of item 9 and the addition of another. Table 2 shows the final draft of the developed tool.

The final draft of items is believed to be under the principles of OBE that serve as the guidelines on how an outcome-based instructional system should function. Spady and Schelbusch (1999), and Mokhaba (2005) call these principles 'power' principles as they believe that combined, they are decisive factors in creating conditions that enable learners to learn more, to demonstrate higher levels of skills, and to get credit for their accomplishments. These principles are: one, clarity of focus on outcomes - outcomes are to be clarified and made known to everyone before learning takes place; two, design back - referring to planning from the end "backward mapping" by tracing backward from the outcome; and three, high expectations - meaning that there should be an establishment of high, challenging performance standards for learners, so that they are continuously challenged to improve as they grow and mature on the type of learning defined in the outcomes; and four, expanded opportunity - OBE educators should vary learning rates,

Table 2

Final Draft of Items of the Evaluation Tool

Statement
1. The syllabus provides what learners are expected to know and be able to do at the desired level of competence.
2. The course outcomes are aligned with the program's educational objectives.
3. The intended learning outcomes are specific.
4. The intended learning outcomes are measurable.
5. The intended learning outcomes are confirmable through performance tasks and workloads.
6. The intended learning outcomes are phrased to be realized in flexible learning.
7. The teaching-learning activities include both synchronous and asynchronous modality.
8. The time frame for teaching learning activities depends on their complexity.
9. The teaching-learning activities provide the utilization of various tools in the delivery of synchronous and asynchronous instruction.
10. The syllabus lists required and supplementary materials (Printed and e-copy) from various sources.
11. The resources in the reference lists are up to date.
12. The syllabus invites students into the course and subject matter by providing context.
13. The syllabus shows a progression towards meeting essential components of the work being completed, critiqued, or assessed.
14. The syllabus provides a clear explanation of the evaluation of the assessment process and measurement.
15. The assignment of weights for the learning evidence and assessment activities depends on their complexity.
16. The syllabus provides for varied submission platforms for assessment tasks.
17. The syllabus shows a constructive alignment from intended learning outcomes with teaching-learning activities and outcomes-based assessment.

Table 3

Results Exploratory Factor Analysis

Item Code	Item	F1	F2
Q11	The resources in the reference lists are up to date.	**.816**	
Q16	The syllabus provides varied submission platforms for assessment tasks.	**.813**	
Q14	The syllabus provides a clear explanation of the evaluation of the assessment process and measurement.	**.809**	
Q10	The syllabus provides a list of required and supplementary materials (printed and e-copy) from various sources.	**.781**	
Q12	The syllabus invites students into the course and subject matter by providing context.	**.763**	
Q9	The teaching-learning activities provide the utilization of various tools in the delivery of synchronous and asynchronous instruction.	**.718**	
Q17	The syllabus shows a constructive alignment of intended learning outcomes with teaching-learning activities and outcomes-based assessment.	**.698**	**.515**
Q13	The syllabus shows a progression towards meeting essential components of the work being completed, critiqued, or assessed.	**.692**	**.459**
Q7	The teaching-learning activities include both synchronous and asynchronous modality.	**.666**	**.430**
Q15	The assignment of weights for the learning evidence and assessment activities depends on their complexity.	**.631**	**.472**
Q4	The intended learning outcomes are measurable.		**.775**
Q3	The intended learning outcomes are specific.		**.762**
Q5	The intended learning outcomes are confirmable through performance tasks and workloads.		**.760**
Q1	The syllabus provides what learners are expected to know and be able to do at the desired level of competence.		**.722**
Q2	The course outcomes are aligned with the program's educational objectives.		**.721**
Q6	The intended learning outcomes are phrased to be realized in flexible learning.	**.532**	**.584**
Q8	The time frame for teaching-learning activities depends on their complexity.		**.537**

as not all learners learn equally fast or in the same manner.

Validation of OBE Syllabus Evaluation Form

The evaluation tool was tested with 49 HEIs faculty members to establish its reliability. The result showed that the device has a high Cronbach's alpha of .963. This result suggests that the developed tool has a good psychometric property.

To establish the instrument's construct, exploratory factor analysis (EFA) was done. The result shows that the Kaiser-Meyer-Olkin measure of sampling adequacy is 0.936, which signals that the conduct of the factor analysis is useful with the data to be analyzed. In addition, the Bartlett's test of sphericity was significant ($x^2(136) = 4018.460$; $p < 0.000$). Further, in the final EFA, 17 items were retained with factor loadings from 0.430 to 0.816, as shown in Table 3.

The result of the construct validity, as shown in Tables 4 and 5, revealed two factors. The first factor consisted of 10 items that refer to the timeliness of the reference lists, submission platforms, and clarity of the explanation of evaluation on assessment and evaluation. Moreover, the items also included the provision of context that invites the students into the course and the utilization of various tools in the delivery of the instruction, as well as the alignment of the outcomes, activities, and assessment, with progression towards complexity. This factor was labeled *performance criteria.*

Table 4

Factor 1 Constructs

Item Code	Item
Factor 1 – Performance Criteria	
Q11	The resources in the reference lists are up to date.
Q16	The syllabus provides varied submission platforms for assessment tasks.
Q14	The syllabus provides a clear explanation of the evaluation of the assessment process and measurement.
Q10	The syllabus lists required and supplementary materials (printed and e-copy) from various sources.
Q12	The syllabus invites students into the course and subject matter by providing context.
Q9	The teaching-learning activities provide the utilization of various tools in the delivery of synchronous and asynchronous instruction.
Q17	The syllabus shows a constructive alignment of intended learning outcomes with teaching-learning activities and outcomes-based assessment.
Q13	The syllabus shows a progression towards meeting essential components of the work being completed, critiqued, or assessed.
Q7	The teaching-learning activities include both synchronous and asynchronous modalities.
Q15	The assignment of weights for the learning evidence and assessment activities depends on their complexity.

Table 5

Factor 2 Constructs

Factor 2 – Teaching-Learning Process	
Q4	The intended learning outcomes are measurable.
Q3	The intended learning outcomes are specific.
Q5	The intended learning outcomes are confirmable through performance tasks and workloads.
Q1	The syllabus provides what learners are expected to know and be able to do at the desired level of competence.
Q2	The course outcomes are aligned with the program's educational objectives.
Q6	The intended learning outcomes are phrased to be realized in flexible learning.
Q8	The time frame for teaching-learning activities depends on their complexity.

For the curriculum evaluation, attention to individual differences among students should give way to attending to the contingencies among background conditions, classroom activities, and educational outcomes. There are three essential phases of curriculum components where this model revolves: antecedent, transaction, and outcome. In the antecedent phase, the consideration is the environmental factors that might affect the curriculum outcomes. On the other hand, the effectiveness of the curriculum during implementation is being considered in the transaction phase. When the curriculum has been completed, its effects are examined in the outcome phase. The evaluation procedure must consider judgment and descriptions, relying on quantitative and qualitative observations. The report may be absolute or comparative (Snyder, AckerHocevar, & Snyder, 2008).

In addition, Gharajedaghi (2011) reiterates that performance criteria are the expression of what is to be measured and why (i.e., how success is defined). The selection process involves identifying dimensions and/or variables relevant to a successful operation. The items in the questionnaire are grouped to represent performance criteria because all the items refer to the instructional processes reflected in the syllabi.

As mentioned in a summit, to assess student outcomes meaningfully, there should be performance criteria. Performance criteria are specific, measurable statements identifying the performances required to meet the results with confirmable, thorough evidence (in4obe Virtual Summit, 2022). This definition sheds light for the grouping of items to belong under performance criteria because they include activities and processes on delivering instruction.

Furthermore, central to the theme of performance criteria is the concept of assessment. Assessments come in various forms. One of the most effective assessment strategies if the student is engaged in the design and implementation is rubrics (Cockett & Jackson, 2018).

On the other hand, at the macro level, the course ILOs are also constructively aligned to the program ILOs, which are aligned to the HKBU graduate attributes. The learner can achieve these attributes at graduation (Centre for Holistic Teaching and Learning, 2021).

The second factor comprised of seven items that concerned with measurability, specificity, flexibility, confirmability through performance tasks, provisions of expected performances, alignment with the educational objectives, and relativity time-frame. This factor refers to the *teaching-learning process*.

According to Tam (2014), OBE does not specify a specific form of instruction, leaving instructors free to teach their students using any method. Instructors will also recognize diversity among students by using various teaching and assessment techniques during their classes. While OBE does not prescribe the ways to deliver instruction, it should present a clear and non-arbitrary standard that serves as the end goal of each instruction.

Moreover, selecting teaching and learning activities aims to help students attain the intended learning outcomes and engage them in these learning activities throughout the teaching process. According to Biggs (1999), the principles of OBE teaching-learning activity include interconnection, involvement in activities, and performance to maximize students' awareness of their knowledge. The items included under this factor spell out the

interconnectedness, and alignment of objectives, activities, and assessment.

The teaching-learning process in an OBE instruction must be given much emphasis. As Lam and Tsui (2016) reiterates, successful implementation of OBE demands high cost, standard of student learning outcomes, and active involvement of stakeholders-students, faculty, employers, parents, and others. The syllabi should reflect the items identified herein to adhere to the quality of the OBE design.

OBTL is focused not on what the teacher intends to teach but rather the emphasis is on what is the outcome from the learner of that teaching is intended to be. The basic premise of OBTL is that the teaching and learning activities (TLAs) and assessment methods (AMs) are constructively aligned with the intended learning outcomes (ILOs) for the course. In other words, the outcomes determine the curriculum content, the teaching methods and strategies, and the assessment process. This also provides a framework for curriculum evaluation (Centre for Holistic Teaching and Learning, 2021)

Moreover, OBTL, at the course/micro level, expects constructive alignment between the ILOs, TLAs, and AMs such that the learners know what is expected of them (ILOs); be facilitated to achieve the set outcome via well-structured TLAs, and be appropriately assessed for competency in the achievement of said ILO via suitable AMs (Centre for Holistic Teaching and Learning, 2021).

Conclusion

Based on the findings, the researcher concluded that the interplay between performance criteria and teaching-learning process indicators could be used to ensure the quality of the flexible learning-compliant OBE-based syllabi. In the teaching-learning process, the intended learning outcomes are found to be contributory to the delivery of outcomes-based instruction. On the other hand, the performance criteria reveal that the expected outputs should be reflected in all course syllabi. Furthermore, the indicators meet several conditions mentioned by experts in the literature such that they are meaningful to the teachers and learners, reliable and valid, and based on observable behaviors.

Recommendation

Based on the results of the study, the following recommendations are drawn:

1. The study may be replicated to further intensify the validity and reliability of the developed syllabus evaluation tool.
2. A confirmatory study may be conducted to establish and confirm the constructs of the developed syllabus evaluation tool.

Plan for Research Dissemination and Utilization

The result of this research endeavor will be submitted to the Commission on Higher Education for appropriate action. Moreover, the researcher will be presenting the result of this study through national or international research conferences and forums.

References

Biggs, J. (1999). *Teaching for quality learning at university*. Open University Press.

Biggs & Tang. (2007). *Teaching for quality learning at university* (Third edition).

The Society for Research into Higher Education & Open University Press, Mc Graw Hill.

Breckler, S. J. (1990). Applications of covariance structure modeling in psychology: Cause for concern? *Psychological Bulletin*, 107, 260-273. https://doi.org/10.1037/0033-2909.107.2.260.

Burger, M. (2008). *The alignment of teaching, learning and assessment in English home language in grade10 in District 9, Johannesburg*. MA Thesis, University of South Africa.

Caguimbal, D. et al.(2013). Level of awareness of the maritime students on the outcomes-based education. *Educational Research International*, *2*(1), 7-12.

Centre for Holistic Teaching and Learning. (2021). Hong Kong Baptist University. Retrieved from https://chtl-bu.hkbu.edu.hk/main/teaching-and-learning/obtl/

Cockett, A., & Jackson, C. (2018). The use of assessment rubrics to enhance feedback in higher education: An integrative literature review. *Nurse Education Today*, *69*, 8-13.

Commission on Higher Education. (2020). CHED memorandum order no. 46 series of 2020. https://ched.gov.ph/wp-content/uploads/2017/10/CMO-No.46-s2012.pdf

David, F.P. (2002). *Understanding and doing research: A handbook for beginners*. Panorama Printing Inc.

Delors, J. et.al. (1996). Learning: The treasure within. Report to UNESCO of the International Commision on Education for the Twenty-First Century.

Deneen, C. Brown, G., Bond, T., & Shroff, R. (2013). Understanding outcome-based education changes in teacher education: Evaluation of a new instrument with preliminary finding. *Asia-Pacific Journal of Teacher Education*, *41*(4), 441-456. https://www.tandfonline.com/doi/abs/10.1080/1359866X.2013.787392

DeVellis, R. (1991). *Scale development: Theory and applications.* Sage.

Fu, L. Y., & Shang, F. F. (2021). *Cultivating innovative talents in journalism and communication practice in universities based on OBE concept—An example of teaching reform of online and offline hybrid first-class courses*. Cuanbo Yu Banqua, No. 1.

Gharajedaghi, J. (2011) *Systems thinking* (Third Edition).

Goldstein, M. (2006). Subjective Bayesian analysis: Principles and practice. *Bayesian Analysis*, 1(3) 403-420. https://doi.org/10.1214/06-BA116

Green, H. L. (1993). Defining quality. *Assessment and Evaluation in Higher Education*, *8*(1), 9-34.

Guo, P., Wang, L., & Chen, L. (2017). Reform of automobile electronic technology teaching-mode based on OBE educational theory. *Journal of Education and Praxis Research*. 3, (1),1-5. http://www.cayley-nielson.com/jepr

Guskey, T. (1994, September). Defining the differences between outcome-based education and mastery learning. *The School Administrator*, *51*, 34-37.

IN40BE Summit. (2022). Outcome-based education vs. traditional education. Retrieved from https://in4obe.org/

assessment-evaluation

Kirk, D., & Welborn, L. (1992, March). The impact of outcome-based education and the library media program. *Colorado Libraries*, *18*, 5-9.

Harden, R. M. (1999) AMEE Guide No. 14: Outcome-based education: Part 1-An introduction to outcome-based education. *Medical Teacher*, *21*(1), 7-14, DOI: 10.1080/01421599

Harden, R. M., Crosby, J. R., & Davis, M. H. (1999). An introduction to outcome-based education. *Med Teacher*, *21*(1):7–14, 8.

Lam, B. H., & Tsui, K. T. (2016). Curriculum mapping as deliberation–examining the alignment of subject learning outcomes and course curricula. *Studies in Higher Education*, *41*(8), 1371-1388.

Mangali, G. R., Biscocho, S. S., Mary Rose M. Salagubang, M. R. M., & Del Castillo, A. P. (2019). Teaching and learning experiences in Letran's partial implementation of outcomes based education. *International Journal of Multidisciplinary Research and Publications (IJMRAP)*, 2(1), 49-57.

McNeir, G. (1993). Outcome-based education: Tools for restructuring. *Oregon School Study Council Bulletin*.

Ministry of Education, Science, Vocational Training and Early Education. (2013). Zambia's National Assessment Report 2012: Learning Achievement at the Middle Primary School Level. Lusaka: MoESVTEE

Ministry of Education, Science, Vocational Training and Early education (2013). *Zambia education curriculum framework*. Curriculum Development Centre.

Mulenga, I. M., & Luangala, J. R. (2015). Curriculum design in contemporary teacher education: What makes job analysis a vital preliminary ingredient? *International Journal of Humanities, Social Sciences and Education*, *2*(1), 39-51.

Rong, H. (2021). On the OBE-based of connotations and paths in college English Golden Course [J]. *Modern Communication*, (15): 34-36.

Snyder, K. J., Acker-Hocevar, M., & Snyder, K. M. (2008). Living on the edge of chaos: Leading schools into the global age (2nd Ed.). *Mental Health Law & Policy Faculty Publications*. 34. https://digitalcommons.usf.edu/mhlp_facpub/34

Spady, W. G. (1993). Outcome-based education. *ACSA Report*, 5, Belconnen: pii Australian Curriculum Studies Association.

Spady, W. G.. (1994). *OBE: Reform in search of a definition*. (2011-10-13) [2016-10-26]. http://encyclopedia.thefreedictionary.com/Outcome-Based Education.

Spady, W. G., & A. Schlebusch. 1999. *Curriculum 2005: A guide for parents*. Renaissance, Tafelberg.

Tam, M. (2014). Outcomes-based approach to quality assessment and curriculum improvement in higher education. *Quality Assurance in Education*, *22* (2): 158–168. doi:10.1108/QAE-09-2011-0059.

Thai Nguyen University (2013). *Project on standardizing language skills for TNU academic staffs and students of the 2013-2015 and the 2016-2020 periods.* http://www.tnu.edu.vn/Pages/-tnuvb-portal_VanBanPhapQuy-tnudoc-44-

tnusite-1.html

Waxman, H. C. (2001). Research on school-based improvement programs: Its implications for curriculum implementation. *Education*, *15*(3), 318-322.