Research Article

Outcome-Based Teaching and Learning (OBTL) Practices of the Coast Guard Special Operations Force (CGSOF) Specialization Courses

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ABSTRACT

The goal of outcome-based teaching and learning, or OBTL, is to provide students with explicit instructions on what they are expected to learn and how to demonstrate that learning before any instruction even begins. While the idea behind OBTL has been around for a while, the Philippine Coast Guard (PCG) has just lately included it in its training curriculum. The Coast Guard Special Operations Force (CGSOF), one of the PCG's operating units, is dedicated to integrating OBTL into its system through its training institute in order to address the current trend in education. Determining the degree of OBTL practice implementation in the CGSOF-led specialized courses is the primary goal of the research. This study used a mixed-methods research approach that used quantitative and qualitative techniques. mixed-methods research design where survey questionnaires and informal interviews were used in data gathering. There were 42 instructors and 130 trainees from the CGSOF included in the study. The findings revealed that both the instructors' self-assessment and the trainees' observation showed a significant extent in the implementation of OBTL practices. There is a substantial alignment between the measurable competencies that trainees should exhibit at the end of the course with respect to its three main components: the intended learning outcomes (ILOs), teaching and learning activities (TLAs), and assessment tasks (ATs). Despite several identified factors affecting the OBTL implementation, including the lack of equipment and training facilities that most affect the alignment of the ILOs, TLAs, and ATs, it was still indicated that the implementation of OBTL in the CGSOF specialization courses has been applied with a consistently high degree of satisfaction and efficacy, offering instructors and trainees a well-rounded education experience.

Keywords: *Outcomes-Based Teaching and Learning, Intended Learning Outcomes, Teaching and Learning Activities, Assessment Tasks*

Introduction

In the early 1990s, William G. Spady advocated outcome-based education (OBE) as a means of ensuring quality in the American educational system. Eventually, OBE was extended to cover higher education as well. According to the system's proponent, OBE entails organizing the entire curriculum and instructional activities of an institution around the precisely defined objectives we want every student to possess upon graduation (Rao, 2019). Choosing the curriculum and instruction based on the learning objectives that students will exhibit at the end of a program or course is a realistic technique that is commonly utilized today as part of the quality assurance strategy.

By identifying what must be accomplished prior to learning, OBE is an educational system philosophy that is supported, according to the Commission on Higher Education (CHED) through its Panel on Business Management Education. Following the determination of the intended outcomes, predetermined goals are achieved by the implementation of strategies, procedures, techniques, and means. Curricula and educational institutions are seen as methods, not ends. The mission, vision, and goals of the institution itself set the standard. This will be aided by institutional outcomes or the qualifications of attractive graduates. It will then cascade into the program outcomes or the curriculum map. After that, learning objectives will be decided upon and included in the course design. The following elements are included in the program outcomes: The program's progressive development of each intended outcome; the extent to which each will be taught and evaluated throughout; and a description of the suitable learning environment (inputs: teaching and learning systems, support processes, and procedures) required to yield the intended results.

The educational system in the country underwent substantial modifications throughout time, affecting not just the academic community but also military training institutions. To enhance graduates' readiness for international standards, adjustments must be made to instructional strategies, regulations and guidelines, assessment procedures, and student conduct codes. They need a unique approach to teaching, so they can learn and develop holistically.

Like the PCG, the CGSOF pursued curriculum changes and integrated outcome-based teaching and learning (OBTL) practices. The CGSOF is in charge of conducting three (3) of the several specialization courses in the PCG, including the Coast Guard Special Operations Course (CGSOC), Female Rescue Diver Course (FRDC), and Explosive Ordnance Disposal Course (EODC).

To cope with the current trend in the education system, the CGSOF, through its training institute, the Special Operations School (SOS), is committed to implementing these practices in its system. Further, the school aims to provide quality and develop globally competitive Coast Guard Special Operators, with these practices as the key strategies.

In 2021, the SOS endeavored to include OBTL in its specialized courses. Through its specialized courses for PCG personnel, the school is the unit in charge of constantly producing Coast Guard special operators. Because they are accustomed to following established norms, instructors may find it difficult to determine what constitutes appropriate teaching and learning outcomes. To encourage more engaged, real-world, and experiential learning, they are expected to include OBTL in their teaching strategies.

In this study, the researcher focused on the instructors' extent of implementing OBTL practices in the CGSOF specialization courses and the factors that affect its implementation relative to the ILOs, TLAs, and ATs. According to Biggs and Tang (2007), teaching and learning enterprise should be centered on the learning outcomes since learning ultimately matters more than teaching, and teaching quality should be evaluated by the quality of learning that occurs. In addition, teaching methods and curriculum should be "constructively aligned" with the intended learning outcomes, meaning that they are fully integrated and consistent with one another.

Objectives

This paper aimed to determine the extent of the instructors' implementation of the OBTL practices in the CGSOF specialization courses.

The study desired to answer the following specific objectives: 1) to identify the profile of the instructors and trainees in terms of their ranks and OBTL experiences; 2) to determine the instructors' extent of implementing OBTL relative to the ILOs, TLAs, and ATs; 3) to determine the correlation of the instructors' rank and length of teaching experience with their extent of implementing OBTL; and 4) to identify some factors affecting the implementation of OTBL in the CGSOF specialization courses.

Methods

This study employed a quantitative-qualitative mixed-method research design to achieve the purpose of the study by explaining the self-assessment of the instructors and observations of the trainees on the extent of the implementation of OBTL practices in the CGSOF specialization courses. The respondents to the study were the instructors and students of CGSOC, FRDC, and EODC. The total respondents of forty-two (42) instructors and one hundred thirty (130) trainees were randomly selected.

Survey questionnaires were administered to the instructors and trainees to determine the profile of the respondents, the extent of the Instructors involvement in implementing OBTL practices, and the factors affecting the implementation of OBTL. In addition, informal interviews were given to selected instructors and trainees. Both the instructor and trainee questionnaires' reliability was determined using Cronbach's alpha and was acceptable given their reliability coefficient indexes of 0.82 and 0.73, respectively. The survey questions are about the self-assessments of the instructors and observations of the trainees on the extent

of implementation of OBTL practices in the CGSOF specialization courses. The survey questionnaire is composed of fourteen (14) item questions for the respondents with respect to the implementation of OBTL practices. The questionnaires were administered, and consent forms were discussed for ethical considerations. A 4-point Likert scale and Pearson correlation coefficient were used in the statistical analysis.

Result and Discussion

Figure 1 presents the rank distribution among the 42 CGSOF instructors. The ranks range from CG SN2/SW2 (E-2) to CG CPO (E-7), with notable variations in frequency and percentage.

The rank with the highest frequency is CG SN2/SW2 (E-2) and CG PO2 (E-5), both with 13 instructors, making up 30.95% of the total instructor sample each. This indicates a significant presence of instructors at these entry-level and mid-level ranks within the CGSOF instructional cadre. Conversely, the rank with the lowest frequency is CG CPO (E-7), with only one instructor, accounting for just 2.38% of the total. This low representation of higher-ranked instructors could suggest a reliance on lower to mid-level ranks for training roles within the CGSOF.

The remaining ranks include CG SN1/SW1 (E-3) with three instructors (7.14%), CG PO3 (E-4) with six instructors (14.29%), and CG PO1 (E-6) also with six instructors (14.29%). The distribution highlights a concentration of instructors at the E-2 and E-5 ranks, which could have implications for the structure and delivery of specialization courses within the CGSOF.
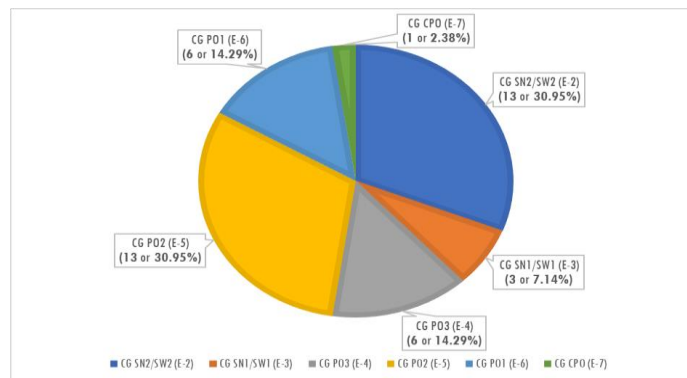

Figure 1. Instructors' Profile in terms of Rank

The distribution shown in Figure 2 reveals that the majority of instructors have relatively short teaching tenures, with 17 instructors (40.48%) having one to five years of experience, representing the highest frequency group. This suggests that a significant percentage of CGSOF instructors are in the early stages of their teaching careers, possibly due to recent recruitment efforts to bring in fresh perspectives and new methodologies, as well as the dynamic nature of the field, which may see a higher turnover rate or regular rotations to maintain an innovative and adaptable teaching force.

Additionally, 15 instructors (35.71%) have less than one year of teaching experience, highlighting a substantial number of instructors who are very new to teaching the course. This could imply a dynamic and fresh perspective being brought into the instructional practices, though it might also indicate a potential need for more seasoned guidance.

In contrast, the lowest frequency is found in the group with more than 5 years of teaching experience, which includes 10 instructors (23.81%). This smaller group of experienced instructors may play a critical role in providing mentorship and stability within the teaching cohort.
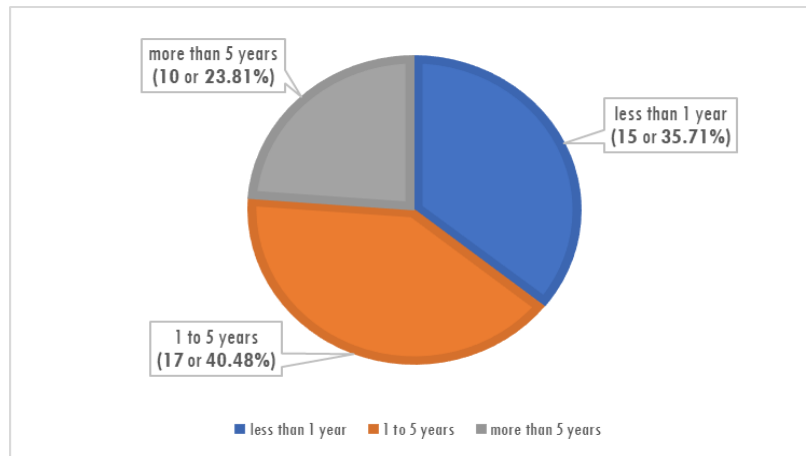

Figure 2. Instructors' Profile in terms of Length of Teaching Experience

Figure 3 details the rank distribution among the 130 CGSOF trainees. The rank distribution indicates a predominance of trainees at the entry-level ranks, particularly CG SN2/SW2 (E-2), which comprises 89 trainees, or 68.46% of the total. This high frequency highlights a substantial intake of individuals at this rank, suggesting a focus on training newer personnel within the CGSOF.

In contrast, the rank with the lowest frequency is CG PO2 (E-5), with only one trainee, representing 0.77% of the total. This indicates a minimal presence of more experienced non-commissioned officers in the training cohort. Additionally, other ranks such as CG LTJG (O-2) and CG ENS (O-1) have low frequencies as well, with two trainees (1.54%) and six trainees (4.62%), respectively.

Further, CG ASN/ASW (E-1) trainees account for 11 individuals (8.46%), CG SN1/SW1 (E-3) for 12 individuals (9.23%), and CG PO3 (E-4) for nine individuals (6.92%). The distribution of these ranks suggests a balanced intake of various junior enlisted personnel, but a clear concentration at the E-2 level.
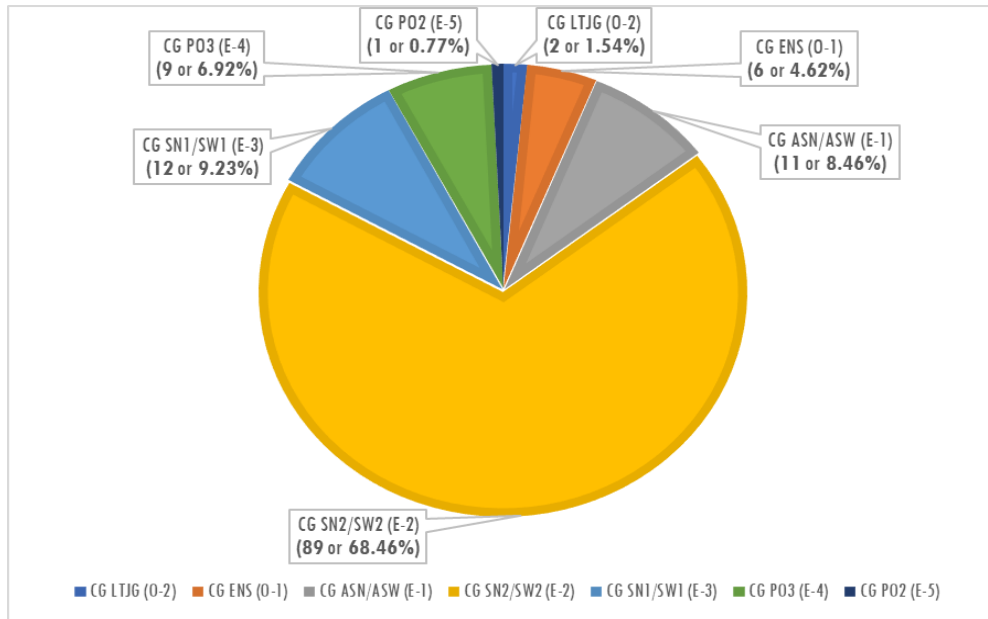
Figure 3. Trainees Profile in terms of Rank

As illustrated in Figure 4, the data reveals that the majority of trainees, 117 individuals, or 90.00%, have 7 to 12 months of training experience, indicating that most trainees are in the midst of their initial training period. This high frequency suggests that the CGSOF specialization courses are primarily catering to individuals who are relatively new to the force but have moved beyond the initial acclimation phase.
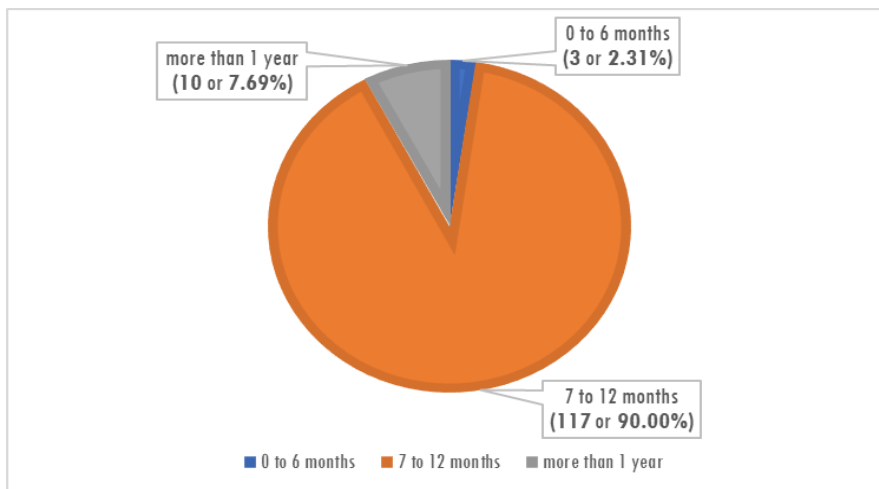
Figure 4. Trainees Profile in terms of Length of Training

In contrast, the lowest frequency is observed in the group with zero to six months of training experience, which includes only three trainees, representing 2.31% of the total. This small percentage of very new trainees suggests that the courses are not typically attended by those in the very earliest stages of their training.

Additionally, there are 10 trainees, or 7.69%, with more than one year of training experience. This indicates a smaller proportion of trainees who have advanced beyond the one-year mark, potentially reflecting a cohort of individuals who have either extended their training due to specialization needs or are undergoing advanced courses.

The instructors' performance in implementing outcome-based teaching and learning (OBTL) practices, specifically regarding the intended learning outcomes (ILO), achieved an overall mean of 3.60, indicating a "great extent." This suggests that instructors generally perceive themselves as highly effective in implementing these practices because the high mean score reflects their confidence and competence in setting and achieving clear, measurable competencies for trainees, demonstrating strong adherence to OBTL principles.

Among the specific performance criteria, the highest weighted mean was 3.79 for the statement, *"The Course Intended Learning Outcomes pertain to the different measurable competencies that trainees should be able to do or demonstrate as a result of completing the course."* This indicates that instructors feel particularly confident that the learning outcomes they set are clear and measurable.

Conversely, the lowest weighted mean was 3.50 for *"The course aims and objectives/course description have been completed/reviewed."* While still falling within the "Great Extent" category, it suggests a slightly lower level of confidence or frequency in reviewing and completing course aims and objectives compared to other criteria.

Other notable findings include high ratings for the clarity and appropriateness of the intended learning outcomes (3.64), their expression from the trainee's perspective using observable and assessable action verbs (3.57), their reasonableness given the available resources (3.55), and the comprehensiveness of having 3 to 6 learning outcomes (3.52). These consistent ratings demonstrate a strong adherence to OBTL principles among the instructors, with all criteria rated within the "Great Extent" range.

Overall, these results reflect a positive self-assessment by the instructors regarding their implementation of outcome-based teaching and learning practices, with particular strengths in defining measurable competencies and areas for slight improvement in the regular review of CGSOF courses' aims and objectives.

Table 1. Instructors' Extent in Performing OBTL Practices in terms of Intended Learning Outcomes

Intended Learning Outcomes (LOIs)	Mean	Verbal Interpretation
1. The Intended Learning Outcomes pertain to the different measurable competencies that trainees should be able to do or demonstrate as a result of completing the course.	3.79	Great Extent
2. The Intended Learning Outcomes are clearly stated in terms of what trainees can do, made explicit to the course, and appropriate to the level.	3.64	Great Extent
3. The Intended Learning Outcomes are reasonable given the available resources and neither easy nor impossible to attain, but somewhere in between.	3.57	Great Extent
4. The Intended Learning Outcomes are expressed from the trainee's perpective, and in the form of low/ high level action verbs signifying observable and assessable learning outcomes.	3.55	Great Extent
5. There are between 3 to 6 comprehensive Intended Learning Outcomes.	3.52	Great Extent
6. The course aims and objectives/ course description have been completed/ reviewed.	3.50	Great Extent
Overall Mean	**3.60**	**Great Extent**

Legend: 3.26-4.00: Great Extent; 2.51-3.25: Moderate Extent;
1.76-2.50: Less Extent; 1.00-1.75 No Extent

As detailed in Table 2, the overall weighted mean for this aspect was 3.72, with a verbal interpretation of "great extent," indicating a high level of alignment and implementation of these practices among the instructors in delivering the course.

The highest weighted mean, 3.76, was attributed to the statement, *"The teaching and*

learning activities show clear evidence of how the activities align with the intended learning outcomes." This suggests that instructors are particularly confident that their teaching and learning activities are effectively designed to meet the intended learning outcomes.

The lowest weighted mean, 3.69, was for *"The Teaching and Learning Activities show the different types of activities that will be used to help trainees achieve the intended learning outcomes."* Although this score is the lowest, it still falls within the "Great Extent" range, indicating that instructors generally feel they are employing a variety of activities to facilitate the achievement of learning outcomes.

Another notable finding is the weighted mean of 3.71 for the statement, *"Different*

teaching and learning activities have been incorporated to address all the intended learning outcomes. Each teaching and learning activity can be mapped to one or more intended learning outcomes, and vice versa." This highlights that instructors believe they are effectively using diverse teaching and learning strategies to comprehensively address all intended learning outcomes.

Overall, the results reflect strong adherence to OBTL practices in terms of teaching and learning activities. Instructors demonstrate confidence in their ability to align activities with learning outcomes and utilize a variety of methods to achieve the goals and objectives of CGSOF specialization courses.

Table 2. Instructors' Extent in Performing OBTL Practices in terms of Teaching and Learning Activities

Teaching and Learning Activities (TLAs)	Mean	Verbal Interpretation
1. The different Teaching and Learning Activities have been incorporated to address all the Intended Learning Outcomes. Each Teaching and Learning Activities can be mapped to one or more Intended Learning Outcomes, and vice versa.	3.76	Great Extent
2. The Teaching and Learning Activities show the different types of activities that will be used to help trainees achieve the Intended Learning Outcomes.	3.71	Great Extent
3. The Teaching and Learning Activities show clear evidence of how the activities align with the Intended Learning Outcomes.	3.69	Great Extent
Overall Mean	**3.72**	**Great Extent**

Legend: 3.26-4.00: Great Extent; 2.51-3.25: Moderate Extent; 1.76-2.50: Less Extent; 1.00-1.75 No Extent

As for the assessment tasks, the findings show that instructors are committed to standardized and effective evaluation strategies (Table 3). The overall mean score of 3.75, indicating a "great extent," highlights instructors' dedication to aligning assessment practices with the intended learning outcomes (CILO).

The highest weighted means, both at 3.79, were for the statements: *"The purpose of each assessment is clearly stated and its relationship to the intended learning outcomes is clearly evident to the trainee,"* and *"Appropriate weighting of assessment methods is shown, and tasks take on a variety of forms, including essays, participation, exams, written reports, group discussions,*

etc." These indicate that instructors feel particularly confident in clearly communicating the purpose of assessments and utilizing a variety of assessment methods to align with course outcomes.

The lowest weighted mean was 3.69 for *"Assessment rubrics are included with assessments."* Although this is the lowest score, it still falls within the "Great Extent" range, suggesting that while instructors are generally including rubrics with assessments, there might be room for further enhancement in this area to ensure consistency and clarity in evaluation criteria.

Other relevant findings include a weighted mean of 3.76 for *"The assessment is aligned with the appropriate intended learning outcomes to ensure that there is sufficient evidence to show whether trainees will have achieved the intended learning outcomes at the end of the course"* and a weighted mean of 3.71 for *"Each trainee's intended learning outcomes are assessed. Details about the nature of the assessment are required (just stating 'assignment, tests, or final exam' is not sufficient)."* These results indicate a strong alignment between assessments and intended learning outcomes to ensure that assessments provide valid evidence of trainees' achievements.

Overall, the findings indicate a strong implementation of OBTL practices in terms of assessment tasks. Instructors are confident in their ability to design and implement assessments that align with intended learning outcomes and evaluate trainee performance using various methods.

Magno (2014) explained that the competencies that must be evaluated in the classroom are categorized according to knowledge, understanding, and performance. Educators have utilized various taxonomies, including the updated Bloom's Taxonomy, Gagne's Taxonomy, Stiggins and Conklin's Taxonomy, Marzano's Dimensions of Learning, and DeBono's Six Thinking Skills, to inform their assessment of students' learning in past curricula. The new curriculum provided by the Department of Education offers standards and a mechanism to appropriately assess these standards.

Table 3. Instructors' Extent in Performing OBTL Practices in terms of Assessment Tasks

Assessments Tasks (ATs)	Mean	Verbal Interpretation
1. Each trainee Intended Learning Outcomes are assessed. Details about the nature of the assessment are required (just stating 'assignment, tests, or final exam' is not sufficient).	3.79	Great Extent
2. Appropriate weighting of assessment methods is shown, and tasks take on a variety of forms including essays, participations, exams, written reports, group discussions, etc.	3.79	Great Extent
3. The purpose of each assessment is clearly stated and its relationship to the Intendent Learning Outcomes is clearly evident to the trainee.	3.76	Great Extent
4. The assessment is aligned with the appropriate Intended Learning Outcomes to ensure that there is sufficient evidence to show whether trainees will have achieved the Intended Learning Outcomes at the end of the course.	3.71	Great Extent
5. Assessment rubrics are included with assessments.	3.69	Great Extent
Overall Mean	**3.75**	**Great Extent**

Legend: 3.26-4.00: Great Extent; 2.51-3.25: Moderate Extent;
1.76-2.50: Less Extent; 1.00-1.75 No Extent

To further effectively implement the outcomes-based teaching and learning syllabus, a series of trainings and workshops can improve the instructors skills in designing the course syllabus, which has a clear direction for outcome-based teaching and learning (OBTL). These instructor training and workshops support teaching improvement and effectiveness and enhance the knowledge, behavior, and skills of the instructors (Lancaster, 2014).

Trainees observe the extent of implementation of outcome-based teaching and learning (OBTL) practices in the CGSOF specialization courses positively (Table 4). The overall mean score of 3.46, indicating a "great extent," suggests a favorable view among trainees regarding the alignment between course objectives and their learning experiences. This further indicates that trainees observe the instructors as highly effective in this area.

The highest weighted mean, 3.76, was attributed to the statement, *"The intended learning outcomes pertain to the different measurable competencies that students should be able to*

do or demonstrate at the end of the course." This suggests that trainees particularly appreciate the clarity and measurability of the competencies they are expected to achieve by the end of the course.

The lowest weighted mean, 3.64, was for the statement, "There are between 3 and 6 comprehensive course intended learning outcomes discussed by the instructors." While this still falls within the "great extent" range, it suggests that some trainees might feel that the number of discussed learning outcomes could be better balanced or more explicitly communicated.

Other notable findings include a weighted mean of 3.74 for *"The intended learning outcomes are expressed from the student's perspective and in the form of low- or high-level action verbs signifying observable and assessable learning outcomes."* This reflects a strong alignment with OBTL principles, emphasizing that the learning outcomes are clear and actionable from the trainee's viewpoint.

Furthermore, the statement, *"The Course Intended Learning Outcomes are reasonable given the available resources and neither easy nor impossible to attain, but somewhere in between,"* received a weighted mean of 3.72, highlighting that trainees find the learning outcomes to be realistic and attainable within the given constraints.

The weighted mean of 3.71 for *"After the course intended learning outcomes of each of the modules have been presented to you, you see that you are making progress toward it little by little"* and 3.70 for *"Intended learning outcomes are clearly stated in terms of what we can do, made explicit to the course, and appropriate to the level"* further underline the trainees' positive observation of their incremental progress and the clarity of the learning outcomes.

Overall, the results show that trainees have a positive view of the instructors' implementation of OBTL practices. They particularly appreciate the clarity, measurability, and attainability of the intended learning outcomes. This positive observation is in line with OBTL principles, indicating that the instructors have effectively implemented and communicated these practices.

Table 4. Trainees' Observation on the Instructors' Extent of Performing OBTL Practices in terms of Intended Learning Outcomes

Intended Learning Outcomes (LOIs)	Mean	Verbal Interpretation
1. The Intended Learning Outcomes are expressed from our perspective, and in the form of low/ high level action verbs signifying observable and assessable learning outcomes.	3.76	Great Extent
2. The Intended Learning Outcomes pertain to the different measurable competencies that we should be able to do or demonstrate as a result of completing the course.	3.74	Great Extent
3. The Intended Learning Outcomes are reasonable given the available resources and neither easy nor impossible to attain, but somewhere in between.	3.72	Great Extent
4. After the Course Intended Learning Outcomes of each of the modules have been presented to you, you see that you are making progress toward it little by little.	3.71	Great Extent
5. The Intended Learning Outcomes are clearly stated in terms of what we can do, made explicit to the course, and appropriate to the level.	3.70	Great Extent
6. There are between 3 to 6 comprehensive Course Intended Learning Outcomes discussed by the instructors.	3.64	Moderate Extent
Overall Mean	**3.71**	**Great Extent**

Legend: 3.26-4.00: Great Extent; 2.51-3.25: Moderate Extent;
1.76-2.50: Less Extent; 1.00-1.75 No Extent

In terms of teaching and learning activities (TLAs), the trainees observed the implementation of outcome-based teaching and learning (OBTL) practices generally positively (Table 5). The overall mean score of 3.80, indicating a "great extent," reflects a favorable view among trainees regarding the alignment between instructional strategies and the intended learning outcomes (ILO) and the effectiveness of teaching and learning activities.

The highest weighted mean, 3.81, was shared by two statements: *"In each intended learning outcome, instructors use appropriate teaching and learning activities to achieve them,"* and *"the teaching and learning activities show different types of activities that are already being used to help the students achieve the intended learning outcomes."* This indicates that trainees strongly observe that instructors are using suitable and varied activities to effectively support the achievement of learning outcomes.

The lowest weighted mean, 3.78, was for the statement, *"The Teaching and Learning Activities are Aligned with the Intended Learning Outcomes."* While slightly lower than the others, this score still falls within the "Great Extent" range, demonstrating that trainees generally feel that activities are well-aligned with the course's intended learning outcomes.

Overall, the results indicate that trainees have a positive observation of the instructors' application of OBTL practices in teaching and learning activities within the CGSOF specialization courses. The high weighted means across all criteria suggest a successful implementation of strategies that support learning outcomes. This fosters an environment where instructional methods align closely with educational goals.

Table 5. Trainees' Observation on the Instructors' Extent of Performing OBTL Practices in terms of Teaching and Learning Activities

Teaching and Learning Activities (TLAs)	Mean	Verbal Interpretation
1. The different Teaching and Learning Activities have been incorporated to address all the Intended Learning Outcomes. Each Teaching and Learning Activities can be mapped to one or more Intended Learning Outcomes, and vice versa.	3.81	Great Extent
2. The Teaching and Learning Activities show the different types of activities that will be used to help us achieve the Intended Learning Outcomes.	3.81	Great Extent
3. The Teaching and Learning Activities show clear evidence of how the activities align with the Intended Learning Outcomes.	3.78	Great Extent
Overall Mean	**3.80**	**Great Extent**

Legend: 3.26-4.00: Great Extent; 2.51-3.25: Moderate Extent;
1.76-2.50: Less Extent; 1.00-1.75 No Extent

The trainees' overall assessment indicates a "great extent" of implementation of OBTL practices in terms of assessment tasks, with an overall mean score of 3.74 (Table 6). This indicates a high level of agreement among trainees regarding the thoroughness and effectiveness of assessment tasks implemented by the instructors.

The highest weighted mean, 3.85, was attributed to the statement, *"Assessment tasks such as assignments, examinations, and practical demonstrations are thoroughly discussed and explained by the instructors."* This suggests that trainees highly value the clarity and comprehensiveness with which instructors communicate assessment tasks, helping them understand what is expected.

The lowest weighted mean, 3.65, was for the statement, *"Assessment rubrics are included with assessments."* While this score is slightly lower, it still falls within the "Great Extent" range, indicating that although trainees find rubrics useful, there might be room for improvement in their inclusion or explanation.

Other notable findings include the weighted mean of 3.76 for *"appropriate weighting of assessment methods is shown, and tasks take on a variety of forms, including*

assignments, examinations, practical demon-strations, group activities, etc." This highlights the diversity and balance in assessment methods, which are appreciated by the trainees. Similarly, a weighted mean of 3.75 was given to *"the purpose of each assessment task is clearly stated and its relationship to the intended learning outcomes is clearly discussed with us,"* indicating that trainees recognize and value the clear linkage between assessments and learning outcomes.

The statement *"The assessment is aligned with the appropriate intended learning outcomes to ensure that there is sufficient evidence to show whether we will achieve the intended*

learning outcomes at the end of the course" received a weighted mean of 3.67. This reflects trainees' observation that the assessments are well-aligned with the course objectives, providing a reliable measure of their attainment.

Overall, the results indicate that trainees have a positive observation of the instructors' execution of OBTL practices in terms of assessment tasks within the CGSOF specialization courses. The high weighted means across all indicators show a successful implementation of assessment strategies that effectively support the learning outcomes, ensuring clarity, alignment, and diversity in assessment methods.

Table 6. Trainees' Observation on the Instructors' Extent of Performing OBTL Practices in terms of Assessment Tasks

Assessments Tasks (ATs)	Mean	Verbal Interpretation
1. Each Intended Learning Outcomes are assessed. Details about the nature of the assessment are required (just stating 'assignment, tests, or final exam' is not sufficient).	3.85	Great Extent
2. Appropriate weighting of assessment methods is shown, and tasks take on a variety of forms including essays, participations, exams, written reports, group discussions, etc.	3.76	Great Extent
3. The purpose of each assessment is clearly stated and its relationship to the Intended Learning Outcomes is clearly evident to us.	3.75	Great Extent
4. The assessment is aligned with the appropriate Intended Learning Outcomes to ensure that there is sufficient evidence to show whether we can achieved the Intended Learning Outcomes at the end of the course.	3.67	Great Extent
5. Assessment rubrics are included with assessments.	3.65	Great Extent
Overall Mean	**3.53**	**Great Extent**

Legend: 3.26-4.00: Great Extent; 2.51-3.25: Moderate Extent;
1.76-2.50: Less Extent; 1.00-1.75 No Extent

Thadani et al. (2013), in pursuing the impacts of outcome-based teaching and learning (OBTL) on students, found that the constructive alignment of the intended learning outcomes (ILOs), teaching and learning activities (TLAs), and assessment tasks (ATs) positively predicts students' satisfaction and their perceived engagement in independent learning, illustrating the benefits of implementation of outcome-based teaching and learning (OBTL) pedagogy.

To support the data collected from the survey questionnaires, an informal interview was conducted in which select CGSOF instructors

and trainees were asked questions about their experiences and observations of the OBTL implementation.

When asked about their awareness regarding OBTL practices, it was revealed that a majority of the CGSOF instructors first encountered these in the previous CGSOC class last 2021 to transform their curriculum and align this according to the principles of OBTL. For instance, one of the CGSOF instructors announced:

Initially, I first heard it last CGSOC class last 2021 when the school

superintendent asked us to read and learn about OBE because that's what he wants to implement.

Similarly, most of the CGSOC trainees are unaware of these practices before enrolling in the CGSOF courses:

This is my first time hearing about these OBTL practices.

In Article III, Sections 11 to 13, the said memorandum indicated CHED's rationale for adopting an outcomes-based question-and-answer monitoring and evaluation. The transition in educational discourse from the transmission of specialist understanding of developing learner abilities for lifetime learning is essential for adjusting to the changing needs in the twenty-first century (CHED, 2014).

The CGSOC instructors were also asked if these practices they provided helped the trainees achieve the Intended Learning Outcomes. OBTL implementation encouraged teaching that is student-centered and student-controlled where content, events, materials, and paces can be influenced by the trainees. One of the CGSOF instructors said:

Aside from the usual classroom discussion, I used different strategies like team discussion and practical demonstration. Because using various strategies will help the trainees develop their skills and discover new ones.

The foundation of OBTL implementation is an engaging, dynamic classroom where students are eager to provide results while raising the standard of instruction. According to Caguitla, et al (2013), if the trainees are learning the desired outcomes in a relatively successful manner, then the main role of the instructor is to get the trainees to engage in learning activities that are likely to result in the achievement of those outcomes. In addition, the CGSOF instructors were asked if the Assessment Tasks effectively measure the Intended Learning Outcomes and one instructor said:

Yes, with the help of the rubrics. Rubrics come in handy. This attests to the objectivity of the trainee's grading. I provide updates on my trainees' performance over time.

Another instructor cited rubrics which is an effective assessment tool for measuring progress and performance and mentioned:

Rubrics are incredibly beneficial to the trainees, in my opinion. They will be made aware of the requirements for what they should perform on these tests and examinations. Furthermore, they perform better when they know what is expected of them.

Another model used in the estimation of trainee performance is rubrics. It is used when evaluating the consistency of the learners' performance evaluation work (Guzman, 2016). Using a heading for self-assessment and tracking, trainees will check their progress and determine the outcome of their work. Enhancing the strategic use of evaluation criteria, instructors should establish practices that enable trainees to focus on the learning process (Fraile, et al, 2017).

The correlation analysis in Table 7 reveals that there is no statistically significant relationship between the instructor's rank and their performance in OBTL practices concerning intended learning outcomes *(r = -.065, p =.682)*, teaching and learning activities *(r = -.108, p =.496)*, and assessment tasks *(r = -.037, p =.818)*.

These findings suggest that an instructor's rank does not significantly influence their performance in implementing OBTL practices. Regardless of rank, instructors tend to perform similarly in aligning teaching activities with course outcomes, incorporating various teaching methods, and designing assessment tasks. This uniformity implies that OBTL practices are consistently applied across different ranks of instructors, highlighting a potential strength in the standardized approach to teaching and learning within the CGSOF specialization courses.

Table 7. Correlation Analysis of Instructors' Rank with their Extent in Performing OBTL Practices

OBTL Practices		Rank
1. Intended Learning Outcomes	Correlation Coefficient	-.065
	Sig. (2-tailed)	.682
	N	42
2. Teaching and Learning Activities	Correlation Coefficient	-.108
	Sig. (2-tailed)	.496
	N	42
3. Assessment Tasks	Correlation Coefficient	-.037
	Sig. (2-tailed)	.818
	N	42

*Note: *p<.05; **p<.01; ***p<.001*

The correlation analysis presented in Table 8 reveals significant correlations between the instructors' length of teaching experience and their performance in OBTL practices. Specifically, there is a statistically significant moderately positive correlation in the area of assessment tasks *(r =.317, p =.041)*. This indicates that instructors with longer teaching experience tend to perform better in designing and implementing assessment tasks aligned with OBTL practices.

Conversely, the analysis shows no statistically significant relationship between the instructors' length of teaching experience and their performance in OBTL practices regarding intended learning outcomes *(r =.145, p =.359)* and teaching and learning activities *(r =.295, p =.058)*. These results suggest that the length of teaching experience does not significantly influence how instructors align course outcomes or incorporate varied teaching activities.

Overall, the length of teaching experience seems to enhance instructors' effectiveness in assessment tasks, but it does not significantly affect their performance in other OBTL practices. This finding suggests the need for further professional development in aligning course outcomes and teaching activities, regardless of the instructors' level of experience.

Table 8. Correlation Analysis of Instructors' Length of Teaching Experience with their Extent in Performing OBTL Practices

OBTL Practices		Rank
1. Intended Learning Outcomes	Correlation Coefficient	.145
	Sig. (2-tailed)	.359
	N	42
2. Teaching and Learning Activities	Correlation Coefficient	.295
	Sig. (2-tailed)	.058
	N	42
3. Assessment Tasks	Correlation Coefficient	.317*
	Sig. (2-tailed)	.041
	N	42

*Note: *p<.05; **p<.01; ***p<.001*

The correlation analysis results in Table 9 reveal significant findings regarding the relationship between trainees' rank and their observations of instructors' performance in OBTL practices. Specifically, there are significant negative correlations between trainees' rank and their observations of intended learning outcomes *(r = -.216, p =.014)* and assessment tasks *(r = -.227, p =.009)*. This indicates that higher-ranking trainees tend to have less favorable perceptions of the clarity and effectiveness of the intended learning outcomes and

assessment tasks compared to lower-ranking trainees.

Conversely, the analysis found no statistically significant relationship between trainees' rank and their perceptions of teaching and learning activities *(r = -.106, p =.230)*. This suggests that trainees' observations of the alignment and variety of teaching and learning activities are consistent across different ranks, indicating that rank does not influence how trainees view the effectiveness and diversity of these activities.

These findings suggest that rank may impact observations of certain aspects of OBTL practices, such as learning outcomes and assessment tasks. However, it does not appear to have an effect on observations of teaching and learning activities. This distinction highlights potential areas for targeted improvements to ensure that higher-ranking trainees have a positive view of course outcomes and assessments, similar to their lower-ranking counterparts.

Table 9. Correlation Analysis of Trainees' Rank with the Instructors' Extent in Performing OBTL Practices

OBTL Practices		Rank
1. Intended Learning Outcomes	Correlation Coefficient	-.216*
	Sig. (2-tailed)	.014
	N	130
2. Teaching and Learning Activities	Correlation Coefficient	-.106
	Sig. (2-tailed)	.230
	N	130
3. Assessment Tasks	Correlation Coefficient	-.227**
	Sig. (2-tailed)	.009
	N	130

*Note: *p<.05; **p<.01; ***p<.001*

The correlation analysis results in Table 10 reveal significant findings regarding the relationship between trainees's length of training experience and their observations of instructors' performance in OBTL practices. Specifically, there was a statistically significant moderately positive correlation between the trainee's length of training experience and their observations of intended learning outcomes *(r =.365, p <.001)* and assessment tasks *(r =.322, p <.001)*. This indicates that trainees with more extensive training experience tend to have more favorable observations of how well the course outcomes and assessment tasks align with OBTL practices. As trainees spend more time in training, they start to recognize and appreciate how well the stated learning outcomes align with their educational goals. Similarly, the correlations indicate that as trainees gain more training experience, they view assessment tasks as more accurate

measures of their achievement of course objectives.

Additionally, a weak but positive correlation was found between the trainee's length of training experience and their observations of teaching and learning activities *(r =.188, p =.032)*. Although the relationship is weak, it still indicates that trainees with longer training experience tend to perceive teaching and learning activities more positively in terms of their alignment with OBTL practices. This suggests that they develop a better appreciation for how these teaching strategies contribute to achieving the intended learning outcomes over time.

These findings suggest that as trainees gain more training experience, they develop a greater understanding of the importance of aligning course outcomes and assessment tasks and the value of using a variety of teaching and learning activities.

Table 10. Correlation Analysis of Trainees' Length of Training with the Instructors' Extent in Performing OBTL Practices

OBTL Practices		Rank
1. Intended Learning Outcomes	Correlation Coefficient	.365***
	Sig. (2-tailed)	< .001
	N	130
2. Teaching and Learning Activities	Correlation Coefficient	.188*
	Sig. (2-tailed)	.032
	N	130
3. Assessment Tasks	Correlation Coefficient	.322***
	Sig. (2-tailed)	< .001
	N	130

*Note: *p<.05; **p<.01; ***p<.001*

The absence of facilities and training tools was one of the most frequent issues affecting the adoption of OBTL in the CGSOF specialization courses. The difficulties of inadequate facilities and equipment make it difficult to implement the intended learning outcomes successfully. Similar to this, when it comes to intended learning outcomes, inadequate facilities and equipment make it difficult to facilitate teaching and learning activities. In addition, conducting assessments that call for particular settings or tools can be difficult for both instructors and trainees in the absence of adequate facilities and equipment.

Another significant factor influencing the implementation of OBTL in the CGSOF specialization courses is the frequency of adverse weather. Unpredictable or recurrently terrible weather seriously hinders outdoor teaching and learning activities, which include pool and open-sea training evolutions and tactical procedures. Unfavorable weather is a major obstacle for field-based or outside activities that are in line with intended learning outcomes. A few activities might be impacted, particularly those that take place outside and restrict hands-on learning opportunities.

The consistent use of the same teaching strategies and evaluation instruments was also discovered to be a key factor influencing the implementation of OBTL. The learning process gets monotonous if the same teaching style is used repeatedly over an extended period, and assessment tasks and trainees' comprehension or readiness will not be aligned if assessments are consistently failing, even when the instruments are used often.

Time constraints that may result in hurried teaching methods; slow learners who require a variety of learning styles and needs; and poor strategic location of training centers that may limit exposure to diverse environments and pertinent course scenarios are some of the factors that have been identified.

Furthermore, the implementation of OBTL with regard to the teaching and learning activities is impacted by the presence of different sources of teaching materials, the delayed delivery of training supplies, and the challenges associated with establishing a rapport with the trainees.

Finally, the lack of intervention following the assessment, the difficulties encountered throughout the evaluation process, and the trainees' inadequate preparation for the assessment all had a major impact on the assessment tasks

Conclusion

The findings reveal that the instructors at the Coast Guard Special Operations Force (CGSOF) specialization courses consist predominantly of newly appointed instructors early in their teaching careers, with most trainees being at the rank of CG SN2/SW2 (E-2). This indicates a focus on personnel who are in the midst of their initial training period.

Instructors consistently rate their practices as highly effective, emphasizing strong alignment with intended learning outcomes, robust teaching strategies, and thorough assessment practices. Trainees, on the other hand, hold a slightly more favorable view of outcome-based teaching and learning (OBTL) practices

compared to the instructors' self-assessments, underscoring the effectiveness of the current OBTL implementation in meeting their educational needs and achieving the intended learning outcomes. The data highlights the strengths in teaching and learning activities, as well as the thoroughness and alignment of assessment tasks, ensuring that trainees are well-supported in achieving their learning goals.

Interestingly, the instructors' rank within the Philippine Coast Guard (PCG) organization does not seem to affect their approach to creating assessment tasks, carrying out teaching and learning activities, or constructing intended learning objectives. However, instructors with longer teaching experience tend to perform better in designing and implementing assessment tasks aligned with OBTL practices. Conversely, higher-ranking trainees tend to have less favorable perceptions of the clarity and effectiveness of the course-intended learning outcomes and assessment tasks compared to lower-ranking trainees, possibly due to different expectations or experiences.

Key challenges to the implementation of OBTL include content-based curriculum policies, a lack of basic infrastructure, insufficient facilities, and heavy teacher workloads. Specific to the CGSOF, the most affecting factors are the lack of instructors, equipment, facilities, and frequent bad weather conditions, which impact the alignment of the intended learning outcomes (ILOs), teaching and learning activities (TLAs), and assessment tasks (ATs)

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