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Classification of Learning Outcomes and Assessment Activities in CHED Prototype and SUC Syllabi based on Kratwohl's Taxonomy

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Abstract- Higher Education Institutions realize their roles in nation building by providing educational experiences that shape individuals' technical, personal and social skills that enable them to be effective and efficient human resources responsive to the demands of the communities they serve. Using the prototype syllabus from the Commission on Higher Education (CHED) and the course syllabi from two State Universities, the present qualitative study aims to categorize the learning outcomes and assessment activities found in the course syllabi in Purposive Communication. Following Kratwohl's (2002) Taxonomy for Teaching, Learning and Assessment, learning outcomes were classified based on the six cognitive skills (i.e., remembering, understanding, applying, analyzing, evaluating and creating). Learning outcomes were also grouped as Higher-Order Thinking Skills (HOTS) and Lower-Order Thinking Skills (LOTS). The same classification (i.e., HOTS and LOTS) was used for the assessment activities. Comparison on the learning outcomes and assessment activities in CHED and SUC's syllabi was also done to determine SUC's adherence to the CHED prototype syllabus.Reasons for the discrepancies on the percentage of learning outcomes and assessment activities between the CHED prototype syllabus and SUC's syllabi were explored and discussed.

Keywords: **Cognitive thinking skills, learning outcomes, assessment, activities, course syllabus**

I. INTRODUCTION

1.1 Background and Related Studies

The Commission on Higher Education (CHED), through the State Universities and Colleges (SUCs),envisions to develop globally competent and empowered human resources, who are ready to the challenges and demands of the 21st century. To realize CHED's vision and mission, educators at the grassroots level design their respective course syllabi based on the CHED prototype syllabi. Needless to say, course syllabus is an important requirement that must be crafted accurately and systematically for this guides thefaculty members to organize the lessons for the students to achieve quality teaching and learning. Kapp (2016) underscored the importance of syllabus that clearly communicates the scope and requirements of a course to students. Syllabus must be carefully crafted and organized, and accurately set expectations around course participation, assignments, and grading. He added that syllabus is a more valuable tool in any class following the course's learning outcomes, which are statements that clearly specify what the students will have achieved and be able to do by the end of a learning activity.For Yildirim and Baur (2016), learning outcomesare usually expressed as knowledge, skills or attitudes. These learning outcomesare categorized in Bloom's Taxonomy.

Bloom's Taxonomy caters the sequence of learning outcomes that teachers set for learners to achieve. It was devised by Benjamin Bloom and group of educators (i.e., Max Englehart, Edward Furst, Walter Hill and David Krathwohl) in the 1940s to place educational goals into specific categories with the belief that this classification would be useful to better measure tertiary students' performance. Each year for the next 16 years, Bloom and his associates modified and refined the framework during the American Psychological

Association convention. After 16 years since 1940s, the final version was published as the Taxonomy of Educational Objectives, presenting the path of education attainment through six orders of learning. Since then, the taxonomy has become the foundation of the teaching process, particularly in the formulation of learning outcomes, activities and assessment.

Bloom's Taxonomy is a classification system of learning outcomes based on the level of students' understanding necessary for achievement or mastery. It consists of six levels with the principle that competence at a higher level implies a reasonable degree of competence at the lower levels (Blooms, 1956). In Bloom's Taxonomy, learning outcomes were categorized into cognitive, affective and psychomotor skills. Set to confirm a student's cognitive level (Harris & Omar, 2015), the cognitive domain is the core of classifying statements based on what is expected from students to learn at the end of the instructional episodes (Krathwohl, 2002). Cognitive skills consist of six levels: knowledge, comprehension, application, analysis, synthesis, and evaluation. Bloom (1956) categorized learning into gradually increasing levels of sophistication, beginning with surface learning skills such as recall of information, moving to deeper learning skills of assessment and evaluation. In 2002, Krathwohl revised Bloom's Taxonomy to Taxonomy for Teaching, Learning and Assessment. In the recent version, cognitive skills have become remembering, understanding, applying, analyzing, evaluating and creating. The last three levels promote Higher-Order Thinking Skills (HOTS) and the first three levels for the Lower-Order Thinking Skills (LOTS), which are all underscored in a well-written course syllabus.

A well written course syllabus is one in which the stated learning outcomes are aligned with teaching activity and assessment tasks. Achieving such alignment helps promote learning among students (Blumberg, 2009).Assessment, being one of the most essential components of the education process, is often used to describe the measurement of what an individual knows and can do (Banta & Palomba, 2015). The process of designing assessment activities is a very challenging task among academician. Adding up to challenge is the fact that they need to produce high quality assessment activities that cater different cognitive levels. Hence, Bloom's Taxonomy has become a common framework for the teaching and learning process and used as a guide for the development of assessment activities (Abduljabbar & Omar, 2020).

A number of studies (e.g., Al-skaf, 2017;Gall, 1970; Khan & Inamullah, 2011; Sewdan, 2009; Stevens, 1912) classified assessment activities based on Bloom's Taxonomy. Following the quantitative approach using analysis card to measure the frequency of assessment activities, Al-skaf (2017) classified the levels of assessment activities in Grade 11 English Book in Syrian Arab Republic based on Bloom's Taxonomy. Results revealed that assessment activities cover all levels of Bloom's Taxonomy (remembering, 51.65%; understanding, 14.89%; applying, 9.02%; analyzing, 2.8%; evaluating, 2.63%; creating, 7.48%). From here it can be surmised that more than three-fourth (75.56%) of the assessment activities belonged to LOTS and the remaining (24.44%) belonged to HOTS. Using the same approach, Sewdan (2009) analyzed and categorized the assessment activities in Grade 10 Geography book in Syria. He found that assessment activities in Geography 10 focused on the low levels of thinking. Using an observational guide and audio recording, Khan and Inamullah (2011) explored the levels of questions secondary teachers (n=20) asked during instruction. Result showed that majority of the questions raised by teachers in class fall under low-level cognitive questions. Of the 267 questions analyzed, 67% were knowledge based, 23% were comprehension based, 7% were application based, 2% were analysis based and 1% was synthesis based. None from among the questions analyzed were classified as evaluation based. The foregoing findings validated the results of earlier studies (i.e., Stevens, 1912; Gall, 1970 in Brown & Wragg, 1993).

The development of English in the Philippines has had its own specific history linked to the educational development of the Philippines under American colonial rule and that of postcolonial era (Antonio, Bacang, Rillo, Alieto, & Caspillo, 2019; Tanpoco, Rillo, Alieto, 2019; Torres & Alieto, 2019a). In 2011, Kirkpatrick noted that the number of programs offered through English is increasing – not only as a medium of instruction and assessment, but as the international language of scholarship and the dissemination of knowledge - due to the universities' desire to internationalize, which for him can be translated to 'Englishization'. In the Philippines, the parameter of intelligence is English, and the parameter of competence is involving oneself in verbal discourse. It has been claimed that one must master the English language because it is widely used as the mode of instruction; may it be in education, public affairs, governance, communication, business, information

technology, and seafaring among others. To achieve competence in the English language, one of the general courses mandated to tertiary students in the Philippines is Purposive Communication. Based on the CHED CMO 20 series of 2013, Purposive Communication is a three-unit course that develops students' communicative competence and enhances their cultural and intercultural awareness through multimodal tasks that provide them opportunities for communicating effectively and appropriately to a multicultural audience in a local or global context. The course aims to equip students with tools for critical evaluation of an array of texts and focuses on the power of language and the impact of images to emphasize the importance of conveyingmessages responsibly.

Classification and analysis of learning outcomes and assessment activities are necessary among educational institutions to determine if they satisfy the different cognitive levels. In the same vein, comparing the learning outcomes and assessment activities in SUC syllabi and CHEd prototype syllabus is also worth exploring. Hence, this study.

1.2 Research Gap and Questions

The above surveyed literature (e.g., Al-Skaf, 2017; Gall, 1970; Khan & Inamullah, 2011; Sewdan, 2009;Stevens, 1912) was limited on the classification of assessment activities based on the Bloom's Taxonomy, and HOTS and LOTS. Hence, studies on the classification of learning outcomes seem lacking. Likewise, there is no study so far or to the researchers' knowledge that explored on comparing the learning outcomes and assessment activities found in the course syllabi from SUC with those set by CHED in the prototype course syllabus. Hence, the present study aims to fill in the gap by classifying the learning outcomes and assessment activities found in SUC and CHED syllabi in Purposive Communication. Specifically, it aims to answer the following research questions:

1. How may the learning outcomes in the SUC and CHED syllabi be categorized according to Bloom's Taxonomy of Learning?
2. How may the assessment activities in the SUC and CHED syllabi be categorized according to Higher-Order Thinking Skills (HOTS) and Lower-Order-Thinking Skills (LOTS)?
3. How may the learning outcomes and assessment activities in the SUC and CHED syllabi be compared?

II. METHODOLOGY

This part presents the methodology used in the study. It consists of four sections: Research design, data collection, framework of analysis and inter-coding of the learning outcomes and assessment activities.

2.1 Research Design

In classifying the learning outcomes and assessment activities used in the CHED prototype and SUC's syllabi on Purposive Communication, the present study employed the qualitative method, specifically the descriptive analytical approach as used in the studies of Abu Humos (2012) and Al-Skaf (2017).

2.2 Data Collection

Syllabi in Purposive Communication were collected from professors, who are teaching the course, in two State Universities. The CHED Prototype Syllabus in Purposive Communication was also downloaded from the CHED website. After securing copies of the course syllabi, the researchers encoded all the learning outcomes and assessment activities found in the course syllabi. Ninety-seven (97) learning outcomes and 105assessment activities were collected. Following what Yamanka and Wu (2014) did in instances where more than one learning outcomes were specified in a learning outcome statement, each verb or verb phrase was treated and analyzed as a distinct learning outcome within a particular learning outcome statement. To clarify the learning outcomes and assessment activities found in course syllabi, the researchers interviewed selected faculty members.

2.3 Framework of Analysis

Houghton (2004) advanced the fundamental inquiry, "Where do we begin in seeking to improve thinking?", and one place to start with – asrecommended by the Communities Resolving Our Problems (CROP) – isin defining the nature of thinking. In this study, the researchers begin with the idea that critical thinking among

learners can be achieved through the kinds of learning outcomes, teaching strategies and assessment activities faculty members give to learners. Hence, it is of significant importance to explore these and how they contribute to critical thinking. Based on the available literature on critical thinking skills, levels of thinking skills and Bloom's Revised Taxonomy (i.e., Taxonomy for Teaching, Learning and Assessment), the researchers came up with a concept map (Figure 1) showing the relationship of critical thinking, levels of thinking and the taxonomy. Critical-thinking, which is the foundation of a strong education (Paul & Elder, 2006)is HOTS, which go beyond basic observation of facts and memorization. HOTS require students to be evaluative, creative and innovative. According to Heong et al. (2011), HOTS require thinking to find new challenge such as reaching possibility of answer in new situation. For Brookhart (2010), the ultimate aim in any of the cognitive taxonomies is equipping students to be able to relate their learning to other elements beyond those they were taught to associate with it. HOTS distinguish critical thinking skills from LOTS, reflected by the lower three levels in the taxonomy.

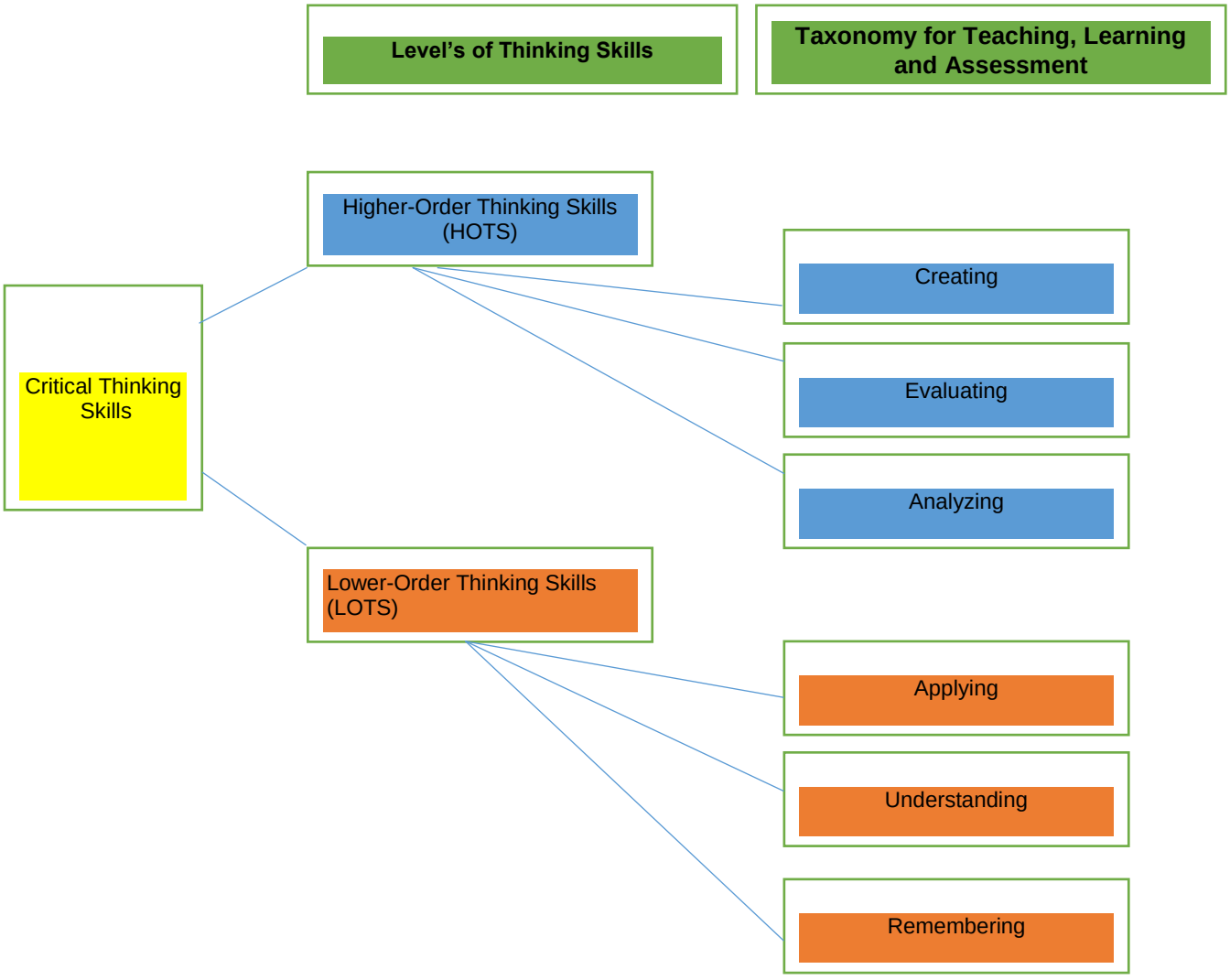

Figure 1. Relationship among Critical and Creative Thinking Skills, Levels of Thinking and Bloom's Taxonomy

The learning outcomes collected from the course syllabi were classified based on Bloom's Revised Taxonomy of Cognitive Learning. Bloom categorizes learning into gradually increasing levels of sophistication, beginning with surface learning skills, such as remembering of information, moving to deeper learning skills of

knowledge generation.Similar to what Yamanka and Wu (2014) did, the researchers encoded the learning outcomes from the course syllabi. Each of the learning outcomes (in the form of a verb) was classified by taxonomy level. Verbs used per taxonomy level served as basis in classifying the learning outcomes. In cases in which verbs used in a learning outcome appeared in both the LOTS and HOTS (e.g., explains – appeared both in understanding, evaluating and creating; contrasts – appeared both in analyzing and evaluating), the context was considered. Aside from classifying the learning outcomes based on Bloom's Taxonomy of Cognitive Learning, they were also classified into LOTS (i.e., remembering, understanding, applying) and HOTS (analyzing, evaluating, creating). Table 1 presents the verbs used in the Bloom's Taxonomy of Cognitive Learning used in the study.

Table 1. Verbs in Bloom's Taxonomy of Cognitive Learning

Higher-Order Thinking Skills in Bloom's Taxonomy (HOTS) (Cognitive)
Creating (*arranges, assembles, builds, collects, categorizes, combines, compiles, composes, constitutes, creates, constructs, devises, designs, develops, explains, generates, manages, modifies, organizes, plans, performs, proposes, rearranges, reconstructs, relates, reorganizes, revises, rewrites, specifies, synthesizes, writes*)
Evaluating (*appraises, apprises, argues, assesses, compares, concludes, contrasts, convinces, criticizes, critiques, decides, defends, describes, determines, discriminates, evaluates, explains, interprets, justifies, measures, ranks, rates, relates, reviews, scores, selects, standardizes, summarizes, supports, tests, validates*)
Analyzing (*analyzes*, arranges, *breaks down, categorizes, classifies, compares, connects, contrasts, deconstructs, detects, diagrams, deconstructs, differentiates, discriminates, distinguishes, divides, explains, identifies, illustrates, infers, integrates, orders, organizes, outlines, relates, selects, separates, structures*)
Lower-Order Thinking Skills in Bloom's Taxonomy (LOTS) (Cognitive)
Applying (*applies, calculates, carries-out, classifies, changes, completes, computes, constructs, demonstrates, discovers, dramatizes, employs, examines, executes, experiments, generalizes, illustrates, implements, infers, interprets, manipulates, modifies, operates organizes, outlines, predicts, prepares, produces, relates, shows, solves, uses*)
Understanding (*abstracts, arranges, articulates, associates, categorizes, clarifies, compares, computes, converts, defends, diagrams, differentiates, discusses, distinguishes, estimates, explains, extends, extrapolates, generalizes, gives, illustrates, infers, interprets, interpolates, matches, outlines, paraphrase , predicts, rearranges, reorders, rewrites, summarizes, transforms, translates*)
Remembering (*cites, defines, describes, identifies, labels, lists, matches, names, outlines, quotes, recalls, recognizes, reproduces, retrieves, selects, shows, states, tabulates, tells*)

The assessment activities collected were classified based on HOTS and LOTS. Table 2 presents the sample assessment activities classified as HOTS and LOTS. Role playing was categorized as HOTS since it requires students to analyze the situations given to them prior to creating a scenario required. Likewise, reflection was considered as HOTS since the task requires students to share their insights – which reflect their previous knowledge, understanding, and judgments – that eventually leads on the creation of their own stance as regards the matters presented to them. Similarly, oral presentations were classified as HOTS since oral production requires students to organize, scrutinize, defend and share their thoughts. In the process of presentation, students also evaluate and clarify the previously shared thoughts to ensure effective and efficient organization and delivery of ideas. In the same vein, conduct of online interview was considered HOTS since it requires students to process the given information and immediately give feedback or follow-up questions to further explore and get information from the interviewee. Generation of follow-up questions during the interview also requires HOTS since the generated follow-up questions are products of students'

judgment on the previously given answer. Finally, given the nature of writing, which entails learners to synthesize their ideas on a given topic, it was classified as HOTS. Meanwhile, drills, exercises and quizzes were categorized as LOTS since they require students to memorize and recall facts that they previously encountered. Quiz is categorized in both HOTS and LOTS since in quizzes, several types of questions ranging from LOTS to HOTS are provided. In this case, the researchers interviewed selected faculty members and asked them the kind of questions they gave to students. The classification of whether a quiz is categorized as HOTS or LOTS was based, therefore, on the types of questions asked during a quiz.

Table 2. Classification of assessment activities based on HOTS and LOTS

Higher-Order Thinking Skills in Bloom's Taxonomy (HOTS) (Cognitive)
role playing, reflection, oral presentation (i.e., public speaking using social media, report presentation), production of outputs (i.e., advocacy campaign materials, digital slides), writing (i.e., speeches, application letter, academic and technical papers) and conduct of online interview, quizzes
Lower-Order Thinking Skills in Bloom's Taxonomy (LOTS) (Cognitive)
drills, exercises, quizzes

2.4 Inter-coding of Learning Outcomes and Assessment Activities

Before individually coding the collected learning outcomes and assessments activities, the researchers convened and discussed the process of encodingfollowing the revised Bloom's Taxonomy of Cognitive Learning, and HOTS and LOTS for learning outcomes and assessment activities, respectively. This is in congruence with the inter-coding technique observed by researchers (e.g.,Astrero & Torres, 2020; Torres, Collantes, Astrero, Millan & Gabriel, 2020;Torres & Flores, 2017; Torres & Medriano, 2020). After the initial discussion on coding the data collected, the researchers then proceeded with their individual coding. Cross tabulation results for learning outcomes show the following Kappa (κ) values: between Rater 1 and Rater 2 (κ = .962), between Rater 2 and Rater 3 (κ = .949), and between Rater 1 and Rater 3 (κ = .983), Meanwhile, the following Cohen's Kappa values were obtained for assessment activities: between Rater 1 and Rater 2 (κ = .931), between Rater 2 and Rater 3 (κ = .960), and between Rater 1 and Rater 3 (κ = .958). After the analysis and coding of the learning outcomes and assessment activities, the researchers met and discussed the discrepancies in their coding until they arrived at a consensus on how to code those items that were differently coded.

III. Results and Discussion

This part begins with the discussion on the classification of learning outcomes in SUC and CHED prototype syllabi (3.1). It then compares the learning outcomes found in the syllabi (3.2). The succeeding sections (3.3, 3.4), discuss and compare the assessment activities present in the syllabi.

3.1 Classification of Learning Outcomes in SUCs Syllabi

Table 3presents the learning outcomes of SUC's syllabi based on the six levels of Bloom's Taxonomycategorized intoHOTS and LOTS. Majority (68.42%) of the learning outcomes came from the LOTSand only 31.58% belonged to HOTS.Furthermore, the highest percentage of learning outcomes belongs to "applying" with 28.07%, followed by "understanding (21.05%)", and "remembering (19.30%)" –all categorized under LOTS. On the other hand, "creating (12.28%)", "analyzing (10.53%)", and "evaluating (8.77%)"are all under HOTS.

From the result, it can be deduced that SUC faculty members were aware that in order for their students to achieve HOTS such as analyzing, evaluating and creating, students must first gain mastery of the lessons or contents and at the same time apply such, which actually occur at the lower level of blooms taxonomy. It is for this reason that the requisite knowledge or compendium of knowledge must be stored permanently in the mind of the students ready for retrieval once needed during the process of learning in the HOTS. That could

be the possible reason why there were more learning outcomes on the lower level of Blooms' taxonomy to ensure that knowledge is acquired and stored so that automatic response on the said contents will be automatic. As Kelly (2019) mentioned, LOTS are the foundation of skills required to move into higher order thinking. These are skills that are taught very well in the school systems and it includes activities like reading and writing. In lower order thinking, information does not need to be applied to any real life examples, it only needs to be recalled and slightly understood.

Table 3. Classification of SUC's Syllabi's Learning Outcomes based on Bloom's Taxonomy

Higher-Order Thinking Skills in Bloom's Taxonomy (Cognitive)	%
Creating (*arranges, assembles, builds, collects, categorizes, combines, compiles, composes, constitutes, creates, constructs, devises, designs, develops, explains, generates, manages, modifies, organizes, plans, performs, proposes, rearranges, reconstructs, relates, reorganizes, revises, rewrites, specifies, synthesizes, writes*)	12.28
Evaluating (*appraises, apprises, argues, assesses, compares, concludes, contrasts, convinces, criticizes, critiques, decides, defends, describes, determines, discriminates, evaluates, explains, interprets, justifies, measures, ranks, rates, relates, reviews, scores, selects, standardizes, summarizes, supports, tests, validates*)	8.77
Analyzing (*analyzes, arranges, breaks down, categorizes, classifies, compares, connects, contrasts, deconstructs, detects, diagrams, deconstructs, differentiates, discriminates, distinguishes, divides, explains, identifies, illustrates, infers, integrates, orders, organizes, outlines, relates, selects, separates, structures*)	10.53
Total	**31.58**
Lower-Order Thinking Skills in Bloom's Taxonomy (Cognitive)	
Applying (*applies, calculates, carries-out, classifies, changes, completes, computes, constructs, demonstrates, discovers, dramatizes, employs, examines, executes, experiments, generalizes, illustrates, implements, infers, interprets, manipulates, modifies, operates organizes, outlines, predicts, prepares, produces, relates, shows, solves, uses*)	28.07
Understanding (*abstracts, arranges, articulates, associates, categorizes, clarifies, compares, computes, converts, defends, diagrams, differentiates, discusses, distinguishes, estimates, explains, extends, extrapolates, generalizes, gives, illustrates, infers, interprets, interpolates, matches, outlines, paraphrases, predicts, rearranges, reorders, rewrites, summarizes, transforms, translates*)	21.05
Remembering (*cites, defines, describes, identifies, labels, lists, matches, names, outlines, quotes, recalls, recognizes, reproduces, retrieves, selects, shows, states, tabulates, tells*)	19.30
Total	**68.42**

3.2 Classification of Learning Outcomes in CHED Prototype Syllabus

Table 4 reveals that majority (60%) of the learning outcomes were under the LOTS and only 40 % were under the HOTS. Forty-five percent of the LOTS learning outcomes belonged to applying, while 10% belonged to remembering. On the other hand,35% of learning outcomes in the HOTS were under creating,and the remaining 10% was distributed equally to evaluating and understanding.

Table 4. Classification of CHED Prototype Syllabus' Learning Outcomes based on Bloom's Taxonomy

Higher-Order Thinking Skills in Bloom's Taxonomy (Cognitive)	%
Creating (*arranges, assembles, builds, collects, categorizes, combines, compiles, composes, constitutes, creates, constructs, devises, designs, develops, explains, generates, manages, modifies, organizes, plans, performs, proposes, rearranges, reconstructs, relates, reorganizes, revises, rewrites, specifies, synthesizes, writes*)	35
Evaluating (*appraises, apprises, argues, assesses, compares, concludes, contrasts, convinces, criticizes, critiques, decides, defends, describes, determines, discriminates, evaluates, explains, interprets, justifies, measures, ranks, rates, relates, reviews, scores, selects, standardizes, summarizes, supports, tests, validates*)	5
Analyzing (*analyzes, arranges, breaks down, categorizes, classifies, compares, connects, contrasts, deconstructs, detects, diagrams, deconstructs, differentiates, discriminates, distinguishes, divides, explains, identifies, illustrates, infers, integrates, orders, organizes, outlines, relates, selects, separates, structures*)	-
Total	**40**
Lower-Order Thinking Skills in Bloom's Taxonomy (Cognitive)	
Applying (*applies, calculates, carries-out, classifies, changes, completes, computes, constructs, demonstrates, discovers, dramatizes, employs, examines, executes, experiments, generalizes, illustrates, implements, infers, interprets, manipulates, modifies, operates organizes, outlines,, predicts, prepares, produces, relates, shows, solves, uses*)	45
Understanding (*abstracts, arranges, articulates, associates, categorizes, clarifies, compares, computes, converts, defends, diagrams, differentiates, discusses, distinguishes, estimates, explains, extends, extrapolates, generalizes, gives, illustrates, infers, interprets, interpolates, matches, outlines, paraphrases , predicts, rearranges, reorders, rewrites, summarizes, transforms, translates*)	5
Remembering (*cites, defines, describes, identifies, labels, lists, matches, names, outlines, quotes, recalls, recognizes, reproduces, retrieves, selects, shows, states, tabulates, tells*)	10
Total	**60**

The CHED prototype syllabus was written by pool of technical experts commissioned to determine the competencies that must be developed among Filipino students taking up the course, Purposive Communication. It can be observed that the highest percentage of learning outcomes were on the levels of applying and creating. This implies that the experts who formulated the learning outcomes of CHED were firm and straightforward in mandating the SUC's faculty members to encourage among their students to practice strategies of communication with a clear purpose and audience in mind, guided by the criteria of effective communication and the appropriate language.

3.3 Comparison of the Learning Outcomes on SUC Syllabi and CHED Prototype Syllabus

Comparison of the learning outcomes (Table 5) in the SUC and CHED'ssyllabishows that the CHED's learning outcomes under the HOTS were higher (40%) than of the SUC's (31.58%). In the LOTS, the SUC's syllabi got higher percentage (68.42%) than that of the CHED's prototype syllabus (60%). For the learning outcomes classified as HOTS,both the SUC and the CHED's syllabi got the highest percentage on "Creating" with 12.28% and 35% respectively. This means that both the CHED and SUC give great extent to the students' development in terms of the "Creating", which is the highest level of the revised Bloom's taxonomy. At this level, the students areto generate, build, or construct solutions or ideas to the problems, to make products, and discover something innovative.As to LOTS, majority of the learning outcomes of the SUC and the CHED got the highest percentage on applying with 28.07% and 45%, respectively. Still in LOTS, SUC's syllabi got the lowest

percentage (19.30%) on remembering, while the CHED syllabus got the lowest percentage (5%) on understanding.

The dominance of the LOTS can be attributed to the fact that both the CHED and SUC recognize the need to first develop students' basic level of knowledge, which would then be their springboard to attain HOTS. As emphasized in the Bloom's Taxonomy (Bloom, 1956), it is critical for students to start from the bottom level and work their way up. LOTS require less cognitive processing, but provide an important base for learning. Meanwhile, the higher levels require deeper learning and a greater degree of cognitive processing, which can presumably only be achieved once the LOTS have been mastered.The knowledge the students got from the LOTS would make them capable of doing the HOTS. If a person does not realize all LOTS and move up to HOTS, then this person will not be prepared for real life situations. This is because LOTS only needs to be recalled and slightly understood.Furthermore, this is also a reflection of teachers'knowledge on categorizingand designing their learning outcomes that would lead the students move in the pyramid of learning so completion of each level before moving up is necessary.This is in relation to what Abigail Adams (1780) mentioned that, "learning is not attained by chance; it must be sought for with ardor and attended to with diligence".

The foregoing results imply that the CHED, being the country's regulatory organization for higher education in the Philippines, is more aware on the development of the students' HOTS which is incongruence with its mandate – to promote and ensure relevant and quality higher education and programs that are at par with international standards and graduates and professionals are highly competent and recognized in the international arena. Similar to what Al-skaf (2017) opined, the researchers surmised that the difference in the learning outcomes in SUC course syllabi with that of the CHED prototype syllabus could be a shortcoming in the course since it did not meet what was prescribed by the latter. Meanwhile, contrary to Al-skaf, the researchers interpreted the difference as a manifestation of the course professors' flexibility to come-up with learning outcomes that are responsive to the knowledge, skills and attitudes of their respective learners.

Table 5. Comparison of the SUC and CHED Prototype Syllabi on Learning Outcomes

Higher-Order Thinking Skills in Bloom's Taxonomy (Cognitive)	% (SUC)	% (CHED)
Creating (*arranges, assembles, builds, collects, categorizes, combines, compiles, composes, constitutes, creates, constructs, devises, designs, develops, explains, generates, manages, modifies, organizes, plans, performs, proposes, rearranges, reconstructs, relates, reorganizes, revises, rewrites, specifies, synthesizes, writes*)	12.28	35
Evaluating (*appraises, apprises, argues, assesses, compares, concludes, contrasts, convinces, criticizes, critiques, decides, defends, describes, determines, discriminates, evaluates, explains, interprets, justifies, measures, ranks, rates, relates, reviews, scores, selects, standardizes, summarizes, supports, tests, validates*)	8.77	5
Analyzing (*analyzes, arranges, breaks down, categorizes, classifies, compares, connects, contrasts, deconstructs, detects, diagrams, deconstructs, differentiates, discriminates, distinguishes, divides, explains, identifies, illustrates, infers, integrates, orders, organizes, outlines, relates, selects, separates, structures*)	10.53	-
Total	**31.58**	**40**
Lower-Order Thinking Skills in Bloom's Taxonomy (Cognitive)	% (SUC)	% (CHED)
Applying (*applies, calculates, carries-out, classifies, changes, completes, computes, constructs, demonstrates, discovers, dramatizes, employs, examines, executes, experiments, generalizes, illustrates, implements, infers, interprets, manipulates, modifies, operates organizes, outlines, predicts, prepares, produces, relates, shows, solves, uses*)	28.07	45
Understanding	21.05	5

(*abstracts, arranges, articulates, associates, categorizes, clarifies, compares, computes, converts, defends, diagrams, differentiates, discusses, distinguishes, estimates, explains, extends, extrapolates, generalizes, gives an example, illustrates, infers, interprets, interpolates, matches, outlines, paraphrases , predicts, rearranges, reorders, rewrites, summarizes, transforms, translates*)		
Remembering (*cites, defines, describes, identifies, labels, lists, matches, names, outlines, quotes, recalls, recognizes, reproduces, retrieves, selects, shows, states, tabulates, tells*)	19.30	10
Total	**68.42**	**60**

3.4 Classification of Assessment Activities in SUCs' Syllabi

Table 6 shows the category of assessment activities provided by the faculty handling Purposive Communication from the two SUC. Majority (65.56%) of the assessment activities listed in the different topics belonged to HOTS and less than half (34.44%) belonged to LOTS. This does not conform with the findings in previous studies (i.e., Al-skaf, 2017; Sewdan, 2009; Khan & Inamullah, 2011; Gall, 1970; Stevens, 1912) that assessment activities focused more on LOTS. The difference can be attributed to learners' levels. It can be recalled that in the earlier studies, the learners' levels were Grades 10 and 11, while in the current study, learners were in the tertiary level.

The result indicates that the faculty provided activities that would challenge students' critical thinking skills. Developing the students to use HOTS is good training ground for them to apply the knowledge they acquired and harness their skills for them to become fully prepared in the world of work. This is in response to the observation cited in CMO No. 46 series 2012, that the country is lacking pool of graduates who have the necessary thinking, technical and behavioral competencies.

The result is surprising since it can be recalled from Table 3 that learning outcomes in the SUC's syllabi focused more on LOTS. From here, it can be opined that alignment of the learning outcomes and the assessment activities seems not fully observed. This might be an illustration of what might be actually happening in the classrooms in which teachers design learning outcomes yet, at some point, come up with assessment activities that do not actually measure the intended levels of thinking stated in the learning outcomes.

Table 6. SUC's Assessment Activities as reflected on the Course Syllabi

Assessment Activities	%
Higher-Order Thinking Skills (HOTS) *role playing, reflection, oral presentation (i.e., public speaking using social media, report presentation), production of outputs (i.e., advocacy campaign materials, digital slides), writing (i.e., speeches, application letter, academic and technical papers) and conduct of online interview, quizzes*	65.56
Lower-Order Thinking Skills (LOTS) *drills, exercises, quizzes*	34.44

3.5 Classification of Assessment Activities in CHED Prototype Syllabus

It can be gleaned on Table 7 that an overwhelming majority (86.67%) of the assessment activities reflected on the CHEd prototype course syllabus were categorized under HOTS, while only few (13.33%) assessment activities were categorized under LOTS.

Thoroughly informed of the mission and direction of the Philippines towards producing competent graduates, the technical experts who were commissioned by CHED through the Technical Panel for General Education (TGPE) developed a prototype syllabus with up-to-date and appropriate learning outcomes, assessment activities and materials and resources that would guarantee the success of graduates. This is also

in line with the course's (i.e., Purposive Communication) to equip students with tools for critical evaluation vis-à-vis holistic understanding, intellectual and civic competencies.

Table 7. CHED's Assessment Activities as reflected on the Prototype Course Syllabus

Assessment Activities	%
Higher-Order Thinking Skills (HOTS) *role playing, reflection, oral presentation (i.e., public speaking using social media, report presentation), production of outputs (i.e., advocacy campaign materials, digital slides), writing (i.e., speeches, application letter, academic and technical papers) and conduct of online interview, quizzes*	86.67
Lower-Order Thinking Skills (LOTS) *drills, exercises, quizzes*	13.33

3.6 Comparison of the Assessment Activities on SUC Syllabi and CHED Prototype Syllabus

Table 8 shows the comparison of the SUC and CHED prototype syllabi on assessment activities. The results showed that the assessment activities given by SUC intended for HOTS was only 65.56%, which was lesser compared to the assessment activities reflected on the CHED prototype syllabi (86.67%). Meanwhile, the assessment activities of SUC for LOTS was 34.44%, which was slightly higher than the mandated assessment activities listed in the CHED prototype syllabi (13.33%).

The CHED assessment activities focus on HOTS in order to achieve the intended learning outcomes of Purposive communication, which were set at the beginning of the implementation of GEC courses. According to CHED Memorandum Order No.20 series 2013, Purposive Communication is all about producing students who can write, speak, and present to different audiences and for various purpose. As shown on Table 8, various activities were given to hone students' communicative competence. According to CMO No. 20, the purpose of these combined activities is to enable students to practice strategies of communication with a clear purpose and audience in mind, guided by the criteria of effective communication and the appropriate language.

SUC's assessment activities as reflected in their syllabi are a combination of HOTS and LOTS. This can be attributed to the fact that though professors follow the the prototype syllabi, are still encouraged to exercise their academic freedom which allows them to enhance or modify their own syllabi depending on their capability, availability of materials/resources and with the foremost consideration on the learners' multi-cultural background (e.g., learning styles, intelligence, emotions, personality). Hence, students remain to be faculty members' greatest consideration in developing their syllabi and assessment activities. This is in line with Ryoo and Wing's (2012 in Robles & Torres, 2020) idea that educators engage in a continuous quest to explore a variety of techniques and ideas to improve pedagogy.

Table 8. Comparison of the SUC and CHED Prototype Syllabi on Assessment Activities

Assessment Activities	% (SUC Course Syllabi)	% (CHEd Prototype)
Higher-Order Thinking Skills (HOTS) *role playing, reflection, oral presentation (i.e., public speaking using social media, report presentation), production of outputs (i.e., advocacy campaign materials, digital slides), writing (i.e., speeches, application letter, academic and technical papers) and conduct of online interview, quizzes*	65.56	86.67
Lower-Order Thinking Skills (LOTS) *drills, exercises, quizzes*	34.44	13.33

IV. Conclusion and Recommendations

Educational institutionscater the needs of Filipinos by providing learning environment and opportunities whose ultimate aim is to develop their communication skills. Being the chief agent of change and transformation, they also take unto themselves the responsibility of monitoring and evaluating the learners under the umbrella of school's curriculum (Torres, 2010; Ravago, Gonong, Torres, 2020).

Results may give language educators insights as regards the amount of teaching require to ensure the mastery of the oral communication skills (Tan, Polong, Collantes & Torres, 2020; Torres & Alieto, 2019b) across disciplines, audience and purpose.Syllabus designers should consider learner's needs since understanding and production of speech acts they are likely to come across (Torres, Balasa, Ricohermoso, Alieto, 2020).The discrepancies on the percentage of learning outcomes between the CHED prototype syllabus and SUC's syllabi can be attributed to the reality that most faculty members handling general education courses did not complete education related degree, hence may lack the preparations and comprehensive background with regard to the development of learning outcomes that address both LOTS and HOTS.

Qasrawi (2020) states that the educational reformers are calling for enhancing the HOTS. This enhancement is meant for leading students to be more critical and creative in a way they use the content of knowledge in a thorough comprehension – whichmay assist them to research information, analyze, evaluate and to be critical and creative in responding to questions and in solving their problems.

Based on the findings, it is recommended that educational institutions come up with constant, timely and responsive in-service trainings (Kisanga, 2016 in dela Rama et al., 2020) on designing learning outcomes and assessment activities to assist faculty members who are non-education degree holders. This is in accordance with the idea that giving faculty members with stable and successful professional development experience is a way to improve the quality of teaching and learning in educational institutions. As what Mohammed and Omar (2020) suggested, there is a crucial need to construct a balanced and high quality assessment tasks that meet different cognitive levels. Meanwhile, discrepancies on the percentage of assessment activities are perceived as manifestations of faculty members' creativity and responsiveness brought about by learners' diverse characteristics and readiness to complete tasks. One of the things the researchers noticed is the lack of constructive alignment between the learning outcomes and assessment activities found in the SUC's syllabi. It is noteworthy to mention that their constructive alignment is crucial to students' success. Hence, it is recommended that faculty members be constantly trained on matching their learning outcomes to their pedagogy and eventually to their assessment activities. Lastly, it is recommended that future studies may also look at the learning outcomes and assessment activities found in other general and professional courses offered by HEIs. Likewise, future studies may also explore on the alignment of learning outcomes, teaching strategies and assessment activities.

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