ICFBE 2024

The 8th International Conference on Family Business and Entrepreneurship

HIGHER ORDER THINKING SKILLS AND NEW NORMAL TEACHING STRATEGIES IN THE PROVINCE OF CAPIZ

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ABSTRACT

This descriptive-correlational study was conducted to determine the level of higher order thinking skills and new normal teaching strategies of HEI faculty in the Province of Capiz. Mixed methods of research employing quantitative and qualitative approaches in gathering the data were used. A random sample of 554 HEI faculty from the Province of Capiz were chosen as respondents of the study. A researcher – made questionnaire was used to gather needed data. Statistical tools used to analyze and interpret data were frequency count, percentage, mean, t – test, Analysis of Variance and Spearman rank correlation analysis. The findings of the study revealed that HEI faculty had a very good level of higher order thinking skills as a whole and in terms of analysis, evaluation and creation. Also, they had very good degree of new normal teaching strategies as a whole and in terms of online and non-online approaches. Demographic profile such as age, sex, educational attainment and academic rank tended to affect the level of higher order thinking skills of HEI faculty. On the other hand, length of service did not affect the level of higher order thinking skills of HEI faculty. New normal teaching strategies of HEI faculty significantly differed in terms of various demographic profile such as age, sex, educational attainment, length of service in years and academic rank. Lastly, the level of higher order thinking skills was found to significantly affect the teachers' new normal teaching strategies. Some recommendations were laid by the researchers to promote and foster higher order thinking skills and new normal teaching strategies among HEI faculty.

Keywords: *Higher order skills teaching strategies*

1. Introduction

Education is one of the important aspects that can affect the national vision. Reimaging and revitalizing education are among the catch phases when it comes to offering 21st century education. Around the world, governments here taken various initiates to endure access to education which is the fourth goal of the Sustainable Development Goal (SDG). The major goal of educational institutions in imparting education is to inculcate higher order thinking skills.

Higher Oder Thinking Skills (HOTS) are expected to be integral part of teaching and learning especially at the higher education level. CHED memorandum orders highlighted the importance of students manifesting skills in communication, higher order thinking and use of tools and technology to accelerate learning and teaching Thinking skills.

With the adoption of Outcomes-Based Education (OBE) OBE - an approach that focuses and organizes the educational system around what is essential for all learners to know, value and be able to do to achieve a desired level of competencies, HEIs have to describe the attributes of their ideal graduates based on their visions and missions as part of their institutional goals or outcomes, and using these as bases for developing specific program outcomes (CMO No. 1, s.o. 2005). To respond to the demands of time, critical thinking skills have to be enhanced. Learning plans and syllabi have to be structured in making students to think and solve problems individually; cooperatively and creatively, teachers on the other hand must be conversant with relevant techniques needed in other teaching higher order thinking.

In these times of educational reform, teachers and instructors have placed new urgency on studies of teaching expertise and yet to no avail their competence is still wanting. As observed, many instructors resort to rote memorization and strategies on assessment that simply target the lower order thinking skills. Performance tasks are sometimes void of challenging activities where learners are challenged to think critically to solve existing problems. The lack of targeted and intentional strategies to utilize HOTS in teaching and learning is evidently true that results to low performance.

For these reasons, the researcher has endeavored to explore and be the first study on the phenomenon and attempts to demonstrate a clearer picture of today's teachers' level of higher order thinking skills and degree of new normal teaching strategies as vital factors in the effectiveness of teachers in the teaching and learning process especially in the new normal of education in the Higher Education Institutions in the Province of Capiz.

Statement of the Problem

The main objective of this study was to describe the level of higher order thinking skills and degree of new normal teaching strategies of Higher Education Institutions faculty in the Province of Capiz.

Specifically, this study aimed to answer the following questions:

1. What is the level of higher order thinking skills of HEI faculty in the Province of Capiz as a whole and in terms of analysis, evaluation and creation?
2. What is the degree of new normal teaching strategies of the respondents as a whole and in terms of online and non-online approaches?
3. Is there a significant difference in the level of higher order thinking skills of HEI faculty in the Province of Capiz when grouped according to age, sex, educational attainment, length of service and academic rank of the respondents?
4. Is there a significant difference in the degree of new normal teaching strategies when grouped according to age, sex, educational attainment, length of service and academic rank of the respondents?
5. Is there a significant relationship between the level of higher orderthinking skills of HEI faculty in the Province of Capiz and the degree of their new normal teaching strategies?

Theoretical Framework

This study is anchored on Bruner's theory on constructivism (1960). It is based on the idea that people actively construct or make their own knowledge, and that reality is determined by one's experiences as a learner. As a theory, it encompasses the idea of learning as an active process wherein those learning is able to form new ideas based on what their current knowledge is as well as their past knowledge.

These theories were determined as the framework for this study since they appropriately direct a correlation of higher order thinking skills to teaching strategies, which are the main variables of this research work in the new normal.

Conceptual Framework

This study used independent variables and dependent variables to be described, differentiated and co-related. The socio-demographic profile is the independent variable composed of five characteristics namely, age, sex, educational attainment, length of service and academic rank. The two dependent variables of the study are – the higher order thinking skills and the new normal teaching strategies of HEI faculty in the Province of Capiz. Higher order thinking skills were measured in terms of analysis, evaluation and creation; while new normal teaching strategies were measured in terms of online and non-online approach.

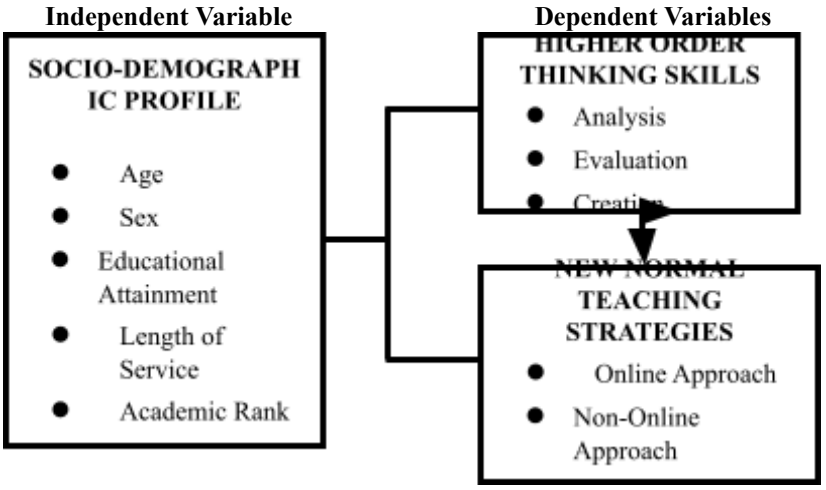

Figure 1. Schematic diagram showing the framework of the study.

2. researchLiterature Review

Higher order thinking skills. Higher-order thinking skills (HOTS) is a concept popular in American education. It distinguishes critical thinking skills from low-order learning outcomes, such as those attained by rote memorization. HOTS include synthesizing, analyzing, reasoning, comprehending, application, and evaluation (Watson, 2019). HOTS is one of the students' abilities that should be developed through teaching and learning. Teachers' knowledge about HOTS and its teaching and learning tactics is a key to successful education.

According to Brookhart (2010), HOTS is one of the important components for an individual to be able to solve new problems in the 21st century. HOTS should be an integral part of teaching and learning especially at the higher education level. Thinking skills lessons should be part of the curriculum if students are to solve problems individually, cooperatively and creatively.

Teachers on the other hand must be conversant with relevant techniques needed for teaching higher order thinking. This means that familiarizing students with HOTS activity is important to help them get ready for solving new issues, acclimatizing themselves in a new atmosphere, and making decisions about a particular problem.

Teachers' knowledge about higher-order thinking skills and its learning strategy of state and private junior high schools teachers across 7 provinces in Indonesia was explored by Retnawati, H., et. al (2018). This query revealed that teachers still misunderstood HOTS. Some teachers assumed that HOTS is a learning phase, other teachers also assumed that HOTS is a method of learning. Considering the fact that some teachers partially understand HOTS, it points out that training are still needed in order to introduce HOTS to teachers. The quality of training is important so that teachers can get more understanding ability and skills about HOTS through these activities.

Yuyun Yulia and Fenita Rizki Budiharti (2019) mentioned that questioning skills increase students' critical thinking. When the teacher questioned, students provided reluctant answers which improve students' engagement in classroom participation. The more they answered and participated, the better English language proficiency they achieved. Based on data collection, the teacher asked various questions by applying Bloom's classification during classroom interaction. However, the outcome was not satisfying because teachers were using a lower level of thinking skill (LOTS) in their lesson. It gave an impact on students' creativity and critical thinking. Later on, they lost interest in developing language skills which resulted in a lack of competency in using the second language. By the end of the study, the researchers suggested that teachers improve their language exposure and proficiency.

Moreover, they opined that the self-instructional approach should be used on the ground that it caters for individual differences of learners and support students to study at their own pace. However, the problem with this approach according to King et al. (2011) is that it does not offer support, i.e. scaffolding to students engaged in HOT activities. Instead King et al. (2011) suggested that lessons involving HOTS require particular clarity of communication to reduce ambiguities and confusion, and improve student's attitudes about thinking tasks.

Looking HOTS as related in relation to one's perceptions, the study of Ahmad (2014) revealed that there are two teacher perceptions about the educational change, positive perceptions and negative perceptions. Positive perceptions cultivate a desire for change and innovation, whereas negative perceptions indicate teachers' unpreparedness to make changes. Both teachers and student are related to the urgency of HOTS.

Thus, this would demonstrate that teachers have realized the importance of HOTS and that they are to be ready to make changes or improvements during learning process. Relative to this, the outcome from students' HOTS development can be achieved by the active role of teachers in planning, implementing, and evaluating HOTS-oriented learning. To be able to plan HOTS-oriented learning, teachers need knowledge of ways, strategies, methods to train students about HOTS (Bartell, 2012).

To further reinforce these perspectives, the following are some of the strategies that could be used in enhancing HOT in the classroom. These should be seen as some of the ways in which HOTS can be effectively taught, as there are many ways to reach a particular goal, these are thus, some of the highlighted strategies needed to reach the goal of integrating and developing HOTS in classroom lessons, the list should not be seen as being too exhaustive, but rather as a place to begin with:

1. Take the mystery away and teach the concept of concepts

Teachers should teach student about HOT, what it entails, its benefits as well as strategies. This enables learners to be aware of and understand their own strengths and challenges with regards to HOT and be better prepared to tackling these challenges.

2. Teach concept of concepts

In teaching a particular lesson, teachers should identify the main concepts and teach them critically. Teachers should also make sure that students understand the critical features that define a particular concept and how they differ from other concepts. In doing so, students are developing their analytical ability which is a major component of HOT.

3. Name and categorize concepts

Students should be alerted when new and key concepts are being introduced into the lesson. Also teachers should guide students in categorizing these concepts to determine which each one is – concrete, abstract, verbal, nonverbal or process. Doing this enables students to develop the skill of aligning their thinking in such a way that goes beyond mere understanding or memorizing of the concept.

4. Move from concrete to abstract and back

Teaching from concrete to abstract and back to concrete can be very helpful for students. When teaching abstract concepts, the use of concrete materials can be used to reinforce learning for both young and old alike. If a student is able to state an abstract concept in terms of everyday practical applications, then that student has understood the concept and can always make useful inferences and applications from what has been learnt to solving new problems.

5. Teach inference and connect concepts

Inferring is making useful conclusion by presenting evidence or facts. This is important as it helps students develop the ability to make logical conclusions upon examining the presented information, evidence or fact. Also teachers should lead students through the process of connecting concepts to other concepts. For example, if the concept being taught is "Tools," a larger concept to which Tools belongs may be "Construction," and an even larger (more inclusive) concept could be "Manufacturing.". This sort of thinking and connecting activity enables students to learn how to connect concepts to what they already know, and with that create a web of knowledge that aids them deeper understanding and clarity.

6. Teach question-answer relationships

Question-answer relationships teach students how to label the type of question being asked and this knowledge helps them in formulating answers. In the earliest study of Thomas and Thorne (2009) they identified two major categories of question-answer relationship (1) questions where answers can be gotten from documented facts in text (book question) and (2) questions that require one's own experience (head question). This enables students to be aware of the relationship between textual information and prior knowledge aiding them in determining what strategy to utilize when seeking answers to questions.

7. Include brainstorming activities in the lessons

Brainstorming is a medium for creating original and useful ideas. When students are divided into groups and are allowed to brainstorm and reflect on solutions to a particular problem, they are open to a deeper level of thinking, as one student generates an idea, the other students are also challenged to think and develop better ideas similarly engaging in higher thinking. The goal here is to generate a pool of ideas that could be tentative solutions to a problem, and with this students can then scrutinize these ideas until a

consensus is reached, in doing this students have been exposed to three levels of higher level thinking-analysis, evaluation and creating (Anderson et al., 2001).

8. Use teaching techniques that provokes higher thinking levels

Teachers have at their disposal a pool of teaching techniques and methods to choose from that provoke higher levels of thinking. Some of these techniques could be problem solving methods, cooperative learning, case method and so on.

9. Emphasize feedback generation for students

Evaluate student's comprehension level and creativity by assessing how well they respond to complex and seemingly abstract problems. This helps students to identify their areas of strengths and weakness in thinking activities. Teach them how to think about their thinking and learning (metacognition). This enables them to capitalize on their strengths and further develop them as well as look for a way around their weaknesses.

Effective questioning with incorporation of higher-order thinking skills (HOTS) is believed to be more helpful to develop students' level of critical thinking (Hassan, 2017).

The execution of HOTS in classroom condition is accepted to empower students to thoroughly consider basically dynamic learning. Educators consolidating HOTS component in their instruction are required to make intuitive inquiries or classroom exercises, by which students can effectively react to the inquiries or create novel thoughts on the subject talked about.

Furthermore, developing higher order thinking skills in students is an important task for higher education. Students who are competent analyzers, synthesizers, and evaluators become workers who are better prepared for the work challenges they will face.

New normal teaching strategies.

One of the most recent public health emergencies of global concern is the recent COVID-19 pandemic, which started in China and almost infected every country in the whole world. This disease is caused by a novel coronavirus (SARS-CoV-2, previously known as 2019-nCoV) and has received global attention from growing infections and on how to eradicate the disease and flatten the curve of infections (Guo et al., 2020).

The COVID-19 pandemic has led many to teach in unfamiliar situations. Perhaps a silver lining has been the widespread practice of synchronous instruction, a potential remedy for the connection students and faculty often missed in traditional online classes. The exponential growth of synchronous sessions will likely shape a "new normal" for online learning, long after the pandemic has passed (Latheef, 2020).

For very nearly two pandemic months, most countries around the globe have briefly shut instructive organizations to contain the spread of the COVID-19 pandemic and diminish diseases (UNESCO, 2020). This conclusion has influenced more than 1.2 billion students worldwide with in excess of 28 million students in the Philippines (UNESCO, 2020). Reactions like network lockdown and network isolate of several countries have driven understudies and educators to study and work from home which prompted the conveyance of web based learning stages (Crawford et al., 2020). Notwithstanding, the usage of web based learning presented various dangers, issues and difficulties to both the educators and understudies, particularly in the advanced education establishments (HEIs) (Bao, 2020).

Distance learning is here to stay. Educational institutions should have a vision for what type of distance learning programs they will implement and the standards they will hold to. Institutions will master distance learning, or in some cases, distance learning trends and demands will master the school.

Role of teaching strategies plays vital role in such inculcation where students can analyze, interpret, reason out, synthesize, evaluate and create. There are several strategies for engaging students in the classroom, and many of them have been written about under the umbrella of "effective teaching strategies" and "student-centered" approaches (Hakala, 2015). Strategies that involve students discussing and sharing ideas, working together toward a common goal, or strategically socializing in ways that enhance learning are well-supported in the research literature on how people learn (Dirksen, 2012).

Two words define education during the difficult times and these were Online and offline. Online, the more functional and accessible word connotes the use of technologies that links people to each other in virtual mode. In classroom setting, this means the absence of classroom or the negation of place. One accesses the Internet and finds a program that connects him to his class and/or to a university or a department, as represented by a professor or moderator (Vallinte, 2020). The Commission on Higher Education suggested to strengthen online platforms and blended learning such as but not limited to google classroom, messenger, zoom, edmodo, Facebook and YouTube (CHED, 2020). In addition, both will

adopt numerous learning delivery options such as but not limited to face-to-face, blended learnings, distance learnings, and home-schooling and other modes of delivery (CHED, 2020; DepEd, 2020). However, the implementation would pose such problems on students who have limited internet access, no gadgets and the poor.

Higher Education Institutions in the Philippines were mandated to change the curriculum to Outcomes Based Education. This was ordered by the Commission on Higher Education (CHED) in its CHED Memorandum Order No. 46 in 2012 to promote learner-centered learning. This is the essence of e-learning. This initiative is promising but issues arise on the readiness of state universities and colleges in adopting such change. The use of technology in the country is still in its infancy, shifting to e-learning platform is still on its planning stages (Doculan, 2016).

A number of schools, especially higher education institutions (HEIs), are already familiar with a blended approach of face-to-face and online learning. Schools, such as the University of the Philippines Diliman (UPD) and the Ateneo de Manila University (ADMU) in Quezon City, and Southville International School and Colleges in Las Piñas City, have been using online learning platforms ahead of the COVID-19 pandemic. (Austria, I., et. al 2020).

The demand for virtual teaching is increasingly being embraced by the educational system in the Philippines due to the COVID-19 pandemic which made the conduct of the traditional classroom instruction an implausible means for the continuous delivery of education.

One facet that differentiates e-learning from traditional forms of instruction is the flexibility that digital modes have with regard to presentation. With digital learning, teachers are not bound to the limitations of print-based materials, but rather have options for interactive presentations, videos, audio, and other multimodal means of teaching.

Moreover, Javier (2020) discussed that the pandemic caused the shift in teaching modality. In response to this situation, teachers now are working and attending sets of training through webinars to learn and explore e-learning technologies which is perceived to be an effort of educating and capacitating teachers for the new role they are soon to take – that is to become managers of virtual classes.

However, the challenge of technology access still remains for public school students. Other factors such as home environment (conduciveness to learning), learner attitudes toward home learning, and technology competence can affect learner outcomes and the effective use of Blended Learning. Learning at home also requires parent participation and support.

It should be noted, even in the third generation, universities' learning centers continued to play an important role in delivery of various administrative and pedagogical processes, such as enrollment, places where face-to-face tutorials were held, and other types of administrative support. In sum, university learning centers continued to serve as the DE institution's physical presence in various areas, centralized buildings wherein students could avail themselves of services they expected from their university (de la Pena-Bandalaria, 2007).

Online courses have become a fantastically well-known route for understudies and workers to propel their training or expert turn of events. Instructing an online course requires various techniques from the customary study hall, so it's significant that educators adjust or build up their abilities to the web based learning condition, to make their materials successful and connecting with for students. Britt (2015) assert the importance of student engagement to online learning because they believe student engagement can be shown as evidence of students' considerable effort required for their cognitive development and their given ability to create their own knowledge, leading to a high level of student success.

Due to this monstrous move, educators presently need to turn their consideration towards this new pattern. Lamentably, internet instructing is diverse from multiple points of view. Conventional instructors presently need to learn better approaches for moving toward their showing techniques, and furthermore learn new practices so as to be effective at what they do.

In the context of Filipino teachers, Javier (2020), teachers reported themselves, in general, to be 'competent' in the use of technology especially those that are utilized in the conduct of virtual instruction. However, the said investigation was limited to teachers teaching the Filipino subject. Thus, in this study, it was endeavored to determine the technological competence of Science teachers. Additionally, the study investigated the extent of technological access of the same respondents as there is no or at best limited study in that said dimension.

Through online instruction teachers can just as easily, if not more so, engage students in a wide-variety of activities that are well-grounded in contemporary research on how people learn. Online student interaction with peers was deemed valuable by several students. They liked to work on collaborative group activities or assignments and enjoyed when their peers were involved in the

discussions. Two individuals mentioned the importance of community and the formation of relationships with other learners.

Depending on learner needs and appropriate pedagogy, instructional contents are packaged in various formats using different media. As mentioned, the development of ODL in the Philippines witnessed instructional packages delivered in print, audiotapes, videotapes, and CD-ROMs. In recent years, going online has made Web-enhanced teaching and learning possible, using rich online resources to supplement and update instructional materials (De la Pena-Bandalaria, 2007).

Synchronous online learning an instructional approach replicates a live class session using video conference platforms such as Zoom, Blackboard, Canvas, etc. Any quick assessments are possible when the instructor is able to use online programs or embedded tools such as polls to check student understanding. Although an instructor lectures in real time, assignments are still completed at students' pace. It just so happens that students are attending "virtually" in different locations. This is what usually comes to mind when people talk about online education, because the term "online" is generally interpreted to mean synchronous. But a synchronous class can be online without being "live" (Austria et. al, 2020).

Synchronous online discussion provides an opportunity for students to interact with one another. Since participants are discussing topics and content in real time, each student is able to respond immediately which creates opportunities for comments that might change the direction or thoughts of another student. Synchronous discussions are dynamic and multi-faceted; their direction may vary with each new comment.

Asynchronous Online Learning as an instructional delivery approach provides an instructor the necessary class resources in the form of content that can be viewed over time. Learning from Home: How Philippine Schools Can Respond to the COVID-19 Outbreak 2 content can come in the form of reading materials, presentation slides and videos. Assessment tools are online quizzes and assignments in which students can take at their own pace. Class interaction is through online forums and chat groups, provided by advances in Learning Management Systems (LMS) technology (Austria, I., et. al 2020).In asynchronous online discussions students are free to discuss topics in greater detail, allowing for more social constructivism. Students do not feel pressured to respond as soon as a question is posed, allowing time to think about how they wish to respond. Asynchronous online discussions may provide a greater opportunity, for students to develop together a more complete answer, specifically one that exhibits higher order thinking skills.

In trying to find out any direct proportional satisfaction on online learning with internet connectivity, the study of Yu, (2020) explored it using Google Hangouts and found out that 35% encountered some issues with audio and 15% encountered issues with the videos and therefore 25% of students rated below average satisfaction with the live session. The same study showed that 90% of students rated online learning above average as they were also satisfied with the internet connectivity.

Teaching will no longer be predominantly done in physical classroom at a specific point in time. Take home work and non-real time interaction will gain more prominence in education. Asynchronous learning breaks the bounds of time (Yu, 2020). Although, in the study of Brierton, S., et al., (2016), as they explored the cognitive level score of discussion demonstrated in synchronous and asynchronous online class discussion, they found out that the cognitive level score for all synchronous discussions combined was in the knowledge level of Bloom's Taxonomy (Bloom, 1956). The overall asynchronous weighted cognitive level score was in the comprehension level of the taxonomy. Neither the synchronous nor the asynchronous group produced online discussions which registered a weighted cognitive level score within the higher order thinking range (analysis, synthesis, evaluation).

Online distance educators must choose between asynchronous and synchronous discussion, then asynchronous should be chosen because it elicited higher weighted cognitive level scores in this study. Asynchronous discussion may also be better because it provides online students with the temporal flexibility they often desire and the time they need for reflection.

3. Research Method

The study used the qualitative and qualitative research design. It described the level of higher order thinks of HEI faculty in the Province of Capiz and the degree of new normal teaching strategies. It also dealt with the significant differences in the level of higher order thinking skills and the degree of the new normal teaching strategies when grouped according to the sociodemographic profile. It also determined the relationship between the level of higher order thinking skills of HEI faculty and the degree of their

new normal teaching. The respondents of the study were limited random sample (using the Slovin's formula sampling techniques) of ---- from a population of ---- teachers in the various HEIs in the Province of Capiz. A researcher-made questionnaire was used together the needed data. Data gathered were analyzed using frequency count, percentage, mean, t-test, ANOVA and Pearson r.

4. Results and Discussion

Level of Higher Order Thinking Skills as a Whole

The level of higher order thinking skills as a whole is shown in Table 1. As whole, faculty members of Higher Education institutions in the Province of Capiz have very good level of higher order thinking skills.

Table 1. Level of higher order thinking skills of the HEI faculty as a whole.

Indicators	Weighted Mean	Verbal Interpretation
Analysis	4.30	Very Good
Evaluation	4.28	Very Good
Creation	4.09	Very Good
Grand Mean	**4.22**	**Very Good**

Furthermore, the level of qualitative or higher order skills of HEI faculty in terms of analysis evaluation and creation are presented in the succeeding tables.

For the levels of higher order thinking skills, these are presented in Tables 2, 3and 4. The qualitative supports the findings of the study.

Analysis. The level of higher order thinking skills of HEI faculty members in terms of analysis is displayed in Table 3 and the qualitative data is displayed in Table 4.

The result reveals that the level of higher order thinking skills of HEI faculty in terms of analysis is "very good" with a grand mean of 4.30. This only shows that the respondents' analysis found that they manifested satisfactorily wherein they could see connections between facts on the topics that they are presenting and also to the instructional materials that they are using.

Table 2. Level of higher order thinking skills of HEI faculty in terms of analysis.

A. Analysis		WEIGHTED MEAN	VERBAL INTERPRETATION
In my class…			
1.	I give an activity where students distinguish between a fact and an opinion.	4.19	Very Good
2.	I give a set of facts for them to observe, analyze and interpret.	4.33	Very Good
3.	I allow my students to explain their answer on a given problem or situation.	4.63	Outstanding
4.	I let my students compare and differentiate two or more events or happenings.	4.47	Outstanding
5.	I let my students examine the distinct and unique characteristics of events or happenings.	4.33	Very Good

6.	I let my students conduct an investigation to produce information to support a view.	4.16	Very Good
7.	I let my students critically investigate about the area of study.	4.21	Very Good
8.	I provide activities for students to design their own questionnaire.	3.97	Very Good
9.	I let my students distinguish between two things or situations.	4.32	Very Good
10.	I let my students determine a point of view on problems or situations being presented.	4.40	Very Good
	Grand Mean	**4.30**	**Very Good**

Based on the findings, it could be gleaned that the respondents' level of higher order thinking skills in terms of analysis are evident and very good. They have the knowledge on how to use analysis skill in their instruction and they prepare and give classroom activities related to analysis which can measure also the analysis skill of the students.

The key questions, theme codes, sub-themes, and frequency of the sub-themes were identified by the researcher, based on the narrative analysis conducted after the recordings of the FGD were transcribed. Different sub-themes emerged from the respondents' remarks during the conduct of the FGD.

The qualitative data on higher thinking skills in terms of analysis reveals that the most common sub-themes that surfaced in the participants' responses involved opinions about "examination and investigation of elements or structures". This sub-theme was evident in 82% of responses. Five (5) faculty members stated that "analysis has something to do by breaking down complex ideas". Four (4) faculty mentioned that it is "differentiating and comparing of ideas". Two (2) of them also emphasized that analysis is "classifying among other things". Another two (2) cited that it is a "process of exploring connection and relationships".

The qualitative data based on the FGD support the quantitative data obtained by the researchers.

Evaluation. The level of higher order thinking skills of HEI faculty members in terms of evaluation is shown in Table 4. Generally, HEI faculty members have a very good level of higher order thinking skills in terms of evaluation with a weighted mean of 4.28. Specifically, the respondents have an outstanding level of higher order thinking skills in terms of evaluation in encouraging their students to give their own judgment on the situation presented (4.50) in their class.

Table 4. Level of higher order thinking skills of HEI faculty in terms of evaluation.

B. Evaluation		**WEIGHTED MEAN**	**VERBAL INTERPRETATION**
In my class…			
1.	I let my students assess the value of theories and ideas presented.	4.36	Very Good
2.	I allow my students to engage and carefully weigh the thoughts based on the knowledge they learned.	4.39	Very Good
3.	I encourage my students to give their own judgement on the situation presented.	4.50	Outstanding
4.	I let my students having a debate about an issue of special interest.	4.03	Very Good

5.	I lead my students to form a panel to discuss the relevance or significance of their views.	3.98	Very Good
6.	I allow my students to defend the effects or impacts of his/her own views or opinions.	4.30	Very Good
7.	I encourage my students to monitor the value and effectiveness of a procedure as it is implemented.	4.24	Very Good
8.	I support my students in verifying the ideas of others.	4.36	Very Good
9.	I lead my students to justify their answers or point of view based on the criteria set.	4.37	Very Good
10.	I provide opportunity for the students to judge or question the elements or topics presented.	4.33	Very Good
	Grand Mean	**4.28**	**Very Good**

The data further revealed that the respondents have a very good level of higher order thinking skills in terms of evaluation in the following class setting: allowing their students to engage and carefully weigh the thoughts based on the knowledge they learned (4.39); leading their students to justify their answers or point of view based on the criteria set (4.37); letting their students assess the value of theories and ideas presented (4.36); supporting their students in verifying the ideas of others (4.36); allowing students to defend the effects or impacts of his/her own views or opinions (4.33); allowing students to defend the effects or impacts of his/her own views or opinions (4.30); encouraging students to monitor the value and effectiveness of a procedure as it is implemented (4.24); letting students having a debate about an issue of special interest (4.03); and leading students to form a panel to discuss the relevance or significance of their views (3.98).

These findings suggest that to a certain extent, teachers have to strengthen the activity which focuses on a panel discussion. It should be part on their classroom instruction to discuss matters related or significant to the views of the students. Having this kind of activities in the class make the teachers more competent in giving judgement and assessment to the views and opinions of the students. This support in turn results to become more vigilant and have good judgement in assessing and formulating views every time the teacher will get points and views of the students.

For the theme of higher order thinking skills in terms of evaluation, a prevalent sub-theme in the qualitative data set, noted by 82% of respondents, was affirmation of practical reasons that evaluation is something to do with "critical appraisal or assessment of something". Almost half of the respondents emphasized that it is about "weighing things that need judgement". Three (3) faculty members have highlighted that "process of defending or justifying opinions and beliefs". One (1) faculty stated that it is "verifying of ideas" and the other one (1) member said, "looking at the details of something".

Creation. The level of higher order thinking skills of HEI faculty members in terms of creation is presented in Table 6.

Generally, HEI faculty members have a very good level of higher order thinking skills in terms of creation with a weighted mean of 4.09. Distinctively, the respondents have an outstanding level of higher order thinking skills in terms of creation in giving activities for students to write about their own understanding in relation to the topic presented (4.51) in their class.

Table 4. Level of higher order thinking skills in terms of creation.

C. Creation	**WEIGHTED MEAN**	**VERBAL INTERPRETATION**
In my class…		
1. I encourage my students to construct graphs and diagrams to describe simple and then more complex events or situations.	4.07	Very Good

2.	I permit my students to create a product in a specific task.	4.28	Very Good
3.	I give activities for my students to write about their own understanding in relation to the topic presented.	4.51	Outstanding
4.	I encourage my students do reflective essays instead of developing a research proposal	4.14	Very Good
5.	I let my students formulate their processes, mechanisms and procedures in posting very good presentation.	4.22	Very Good
6.	I allow my students to use a ready-made script on role playing, pantomime or play instead of creating their own.	3.24	Very Good
7.	I encourage my students to devise a project or propose a plan to address problem or a concern.	4.10	Very Good
8.	I let my students design creative works such as record book or magazine cover for their performance.	4.10	Very Good
9.	I see to it that my students devise a procedure for accomplishing some tasks.	4.15	Very Good
10.	I encourage my students to formulate a working hypothesis based on specified topics and criteria.	4.12	Very Good
	Grand Mean	**4.09**	**Very Good**

Four(4) faculty members cited “device or develop new design”. Three (3) of them expressed that it is to “construct something”. Two (2) respondents emphasized that “use of creation is the highest form of assessing the learners’ know how to create; it is helping the students to work with innovations; it is a way of producing new ideas, something original; develops the analysis of what has been done; generating new ideas; and application of things learned.

In terms of creation, findings of this study show that the HEI faculty revealed that they give experiential learning activities where students are engaged in doing and apply the learnings. Further, they also believe that by giving such activities it enhances the ability to create or make something into existence.

The results affirms the claim of Ramos, et al., (2013), as mentioned that among the three levels of higher order thinking skills, creating or creation must be given more emphasis in the teaching and learning process as it assesses students’ learning as they apply the learnings in doing things.

Kuniawan Ahmad (2018) investigated the teacher's implementation of LOTS and HOTS in the ESL classroom. The researcher observed the materials used by the teacher to conduct the class. The teacher used the learning sheet based on a textbook that contains simple conversation reading text. The researcher noticed that the teacher was not using HOTS in sequence. He tends to mix up the six levels as he wished as there was no proper guideline. From the observation, the researcher noticed that the teacher started the lesson by applying creating skills at first whereby it can confuse the students. In another situation, the teacher did not use evaluating skills at all. Here, the researcher stressed out that the teacher should know the essence of each level and apply the six levels of HOTS in sequence. Due to the lack of positive outcomes, the researcher suggested other researchers focus on teachers’ understanding and perception of LOTS and HOTS.

Degree of New Normal Teaching
Strategies as a Whole

The degree of new normal teaching strategies of HEI faculty members in general is displayed in Table 5. It presents the descriptive statistics of teachers’ new normal teaching strategies in terms of online and non-online approaches.

Table 5. Degree of new normal teaching strategies as a whole.

Indicators	Weighted Mean	Verbal Interpretation
Online Approach	4.15	Very Good
Non-Online Approach	4.23	Very Good
Grand Mean	**4.19**	**Very Good**

As a whole, faculty members of Higher Education Institutions in the Province of Capiz has a very good degree of new normal teaching strategies.

Online approach. The degree of new normal teaching strategies of HEI faculty members in terms of online approach is shown in Table 6. Generally, HEI faculty members have a very good degree of new normal teaching strategies in terms of online approach with a weighted mean of 4.15.

Table 6. Degree of new normal teaching strategies in terms of online approach.

A. Online Approach		**Weighted Mean**	**Verbal Interpretation**
As I use online approach in my teaching,			
1.	I promote collaborative learning by allowing my students to explore on different platforms and educational sites.	4.44	Very Good
2.	I give the links of the lesson where students can access as many times as they need.	4.34	Very Good
3.	I provide learning activities such as vlogs, recorded videos which are designed to keep learning more engaging.	4.10	Very Good
4.	I allow students to use zoom, messenger or google classroom and other conferencing apps to actively engage students in the learning process (e.g., team-problem solving, in-class writing, analysis, synthesis and evaluation instead of passive lectures.	4.39	Very Good
5.	I encourage collaborative learning through group interaction using google hangouts, messenger, google classroom or zoom and other conferencing apps.	4.28	Very Good
6.	I use online games and other e-learning activities rather than telling to promote dialogic inquiry, help expose errors in reasoning and spur critical thinking.	3.40	Good
7.	I provide student-centered lessons and activities that are based on concepts of active learning and that are connected to real-world applications.	4.27	Very Good
8.	I promote cognitive flexibility and the transfer of knowledge and skills by providing opportunities for learners to explore concepts from and verifying these perspectives from available online sources.	4.21	Very Good
9.	I support students by providing information that are safely stored in an online database like live discussion documents, training materials and emails for them access these documents fast, saving valuable time.	4.18	Very Good
10.	I help students navigate websites which are already embedded in the course to appropriately manage keeping track of navigation when jumping from site to site.	3.94	Very Good
Grand Mean		**4.15**	**Very Good**

Distinctively, the respondents have a very good degree of new normal teaching strategies in terms of online approach in the following class setting: promoting collaborative learning by allowing students to explore on different platforms and educational sites (4.44); allowing students to use zoom, messenger or google classroom and other conferencing apps to actively engage students in the learning process (e.g., team-problem solving, in-class writing, analysis, synthesis and evaluation instead of passive lectures (4.39); giving the links of the lesson where students can access as many times as they need (4.34); encouraging collaborative learning through group interaction using google hangouts, messenger,

google classroom or zoom and other conferencing apps (4.28); encouraging collaborative learning through group interaction using google hangouts, messenger, google classroom or zoom and other conferencing apps (4.27); promoting cognitive flexibility and the transfer of knowledge and skills by providing opportunities for learners to explore concepts from and verifying these perspectives from available online sources (4.21); supporting students by providing information that are safely stored in an online database like live discussion documents, training materials and emails for them access these documents fast, saving valuable time (4.18); providing learning activities such as vlogs, recorded videos which are designed to keep learning more engaging (4.10); and help students navigate websites which are already embedded in the course to appropriately manage keeping track of navigation when jumping from site to site (3.94).

Findings of this study are supported by the study of Callo, et al. (2020) that respondent familiarity and capability, preparation, device and access connectivity, self-efficacy, and experience with technology significantly influence their readiness on the conduct of online teaching and learning modality. It is concluded that faculty and student readiness on online teaching and learning is determined by their competence, accessibility of ICT tool, preparedness, confidence in their ability to use technology, and exposure to e-learning materials.

Also, in the study of de la Rama, et al. (2020) the results showed that respondents show positive attitude toward their technological competence. The respondents believe that they are competent, thus is an indication of readiness among them in terms of their technological capability is prevalent. This is consistent with the study of Huang and Liaw (2005), who explained that transfer of lessons is apparently affected by the teacher's attitude toward their competence in using technology in teaching. In addition, Joosten & Cusatis (2019) described the results of a recent federal funded study suggested that the indicators of online course quality (i.e., learner support, course design and organization, content design and delivery, interactivity, and assessment) had significant relationships with students' learning, satisfaction, and academic performance in online courses at a higher educational institution.

Non-online approach. The degree of new normal teaching strategies of HEI faculty members in terms of non-online approach is presented in Table 7. Generally, HEI faculty members have a very good degree of new normal teaching strategies in terms of non-online approach with a weighted mean of 4.23.

Table 7. Degree of new normal teaching strategies of HEI faculty members in terms non-online approach.

B. Non-Online Approach		**Weighted Mean**	**Verbal Interpretation**
As I use non-online approach in my teaching,			
1.	I provide supplemental or complementary materials relevant to the module to clearly and explicitly designate these materials.	4.36	Very Good
2.	I make self-learning kits that give opportunities to practice, apply, analyze or synthesize new information; these may include work sheets or practice exercises, labs, or case studies.	4.32	Very Good
3.	I encourage students to read independently using their hands-on books or the prepared readings in the modules.	4.37	Very Good
4.	I formulate learning activities and techniques that initiate deep thinking and promote critical thinking among students.	4.27	Very Good
5.	I include in the modules/self-learning kits a lot of explanation to methods for solving problems or situations.	4.16	Very Good
6.	I put a summary so students are no longer required to summarize the most important concepts in a given topic.	3.76	Very Good
7.	I provide additional resources for students to extend their learning through enriching activities and evaluation such as photocopy of the materials.	4.30	Very Good
8.	I include in the module the learning activities that utilize open-ended and inquiry-based to encourage creative expression.	4.36	Very Good

9.	I provide module summary that pulls the material together, highlighting to students the objectives they accomplished and what they have learned.	4.07	Very Good
10.	I see to it that in the self-learning kits, practice exercises, labs, or case studies are provided.	4.34	Very Good
Grand Mean		**4.23**	**Very Good**

Distinctively, the respondents have a very good degree of new normal teaching strategies in terms of non-online approach in the following class setting: encouraging students to read independently using their hands-on books or the prepared readings in the modules (4.37); providing supplemental or complementary materials relevant to the module to clearly and explicitly designate these materials (4.36); including in the module the learning activities that utilize open-ended and inquiry-based to encourage creative expression (4.36); see to it that in the self-learning kits, practice exercises, labs, or case studies are provided (4.34); making self-learning kits that give opportunities to practice, apply, analyze or synthesize new information; these may include work sheets or practice exercises, labs, or case studies (4.32); providing additional resources for students to extend their learning through enriching activities and evaluation such as photocopy of the materials (4.30); formulating learning activities and techniques that initiate deep thinking and promote critical thinking among students (4.27); including in the modules/self-learning kits a lot of explanation to methods for solving problems or situations (4.16); providing module summary that pulls the material together, highlighting to students the objectives they accomplished and what they have learned (4.07); and put a summary so students are no longer required to summarize the most important concepts in a given topic (3.76).

The result implies that non-online teaching strategies and approaches of the faculty has something to do with an independent learning by giving out self-learning kits that will suffice the learning of the students to provide resources and allow them to transform their classrooms into active, student-centered learning environments.

The results support the study of Guido (2014) revealed that that the evaluators trusted that the module is very valuable to the course which makes students learning experience well stimulated. The instructional module affirms that the realization of appropriateness, development and comprehension of competency of the module are well identified as it helped students' progress in cognitive abilities and understanding of the concepts. Further he concluded that the instructional module is found to be effective in teaching and stimulates the critical thinking in a coherent academic pursuit as it enhances students' understanding and critical thinking.

In terms of non - online approach, results show the three (3) sub-themes, only one (1) sub-theme expressed the most significant number with (100%) emerged based on the responses shared by the participants and it was "modular learning type using self-learning kit". More than a half or (64%) mentioned that it is "teaching and learning without the use of technology"0 and the last sub-theme expressed in a very minimal number of participants with 36% was "asynchronous type of learning".

5. Conclusions

Based on the findings, the following conclusions are made.

1. The HEI faculty members are highly analytical, evaluative and creative thinkers. These are all indicative of well-developed HOTS in their personal and professional practices.
2. The HEI faculty have strong adherence to and exceptionally adaptive with new normal teaching strategies either online or not.
3. HEI faculty members coming from different age group, sex, educational attainment and academic ranks demonstrate varying levels of higher order thinking skills.
4. Teachers with different profiles employ varied new normal teaching strategies.
5. Higher order thinking skills are directly related to new normal teaching strategies.

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