

Challenges Encountered by Tertiary Teachers in the Utilization of Different Learning Modalities

DOI: 10.5281/zenodo.15674701

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Abstract:

The study assessed the degree of challenges encountered by tertiary teachers in the utilization of different learning modalities: basis for an enhancement plan in one of the city colleges in Central Philippines for the School Year 2020-2021. Using a descriptive research design, data were gathered from 60 actively employed tertiary teachers from the 6 departments of the said tertiary school. The instrument demonstrated excellent validity (4.82 expert rating) and high reliability (Cronbach's Alpha = 0.873). Data analysis involved frequency counts, percentages, means, and the Mann-Whitney, Kruskal Wallis H Test. Ethical standards, including informed consent and confidentiality, were upheld. The study's findings indicate a balanced sample of younger and older professionals, predominantly female, with a strong representation from Elementary and Secondary Education. Tertiary teachers reported low-level challenges in utilizing Self-Learning Modules, Online Learning, and Blended Learning modalities. These challenges remained consistently low across various demographic and academic variables. Statistical analyses revealed no significant differences in the degree of challenges encountered when grouped by these variables. The study identifies issues in printing self-learning modules due to a lack of printers, materials, and scheduling within departments. It recommends creating a year-level-based schedule and investing in a programmable, heavy-duty printer to streamline printing and reduce teachers' workload. To minimize disruptions from poor internet connections during online classes, teachers should record sessions and share the videos afterward, allowing students to review offline. For clarity on when to use face-to-face, online, or modular learning, the school must issue unified guidelines, while departments retain autonomy and promptly update stakeholders via messaging platforms.

Keywords: Challenges encountered, Modular Learning, Teachers

Introduction:

The Department of Education (DepEd, 2021) utilized different learning modalities for School Year 2020 – 2021 pursuant to the safety guidelines of the Inter-Agency Task Force for the management of emerging infectious diseases in the Philippines. Lleo (2020) discussed that as part of the learning continuity plan of the education department, various learning strategies were used. This included home learning with Self-Learning Modules (SLM) and other printed study materials; Online Learning Modality (OLM) where learners are allowed to access their learning resource using a common platform and mostly aided by the internet; and lastly, Blended Learning (BL) where the combination of self-learning modules and online sessions are employed.

The promises of distance learning using any of the said modality is huge and promising. According to Valentine (2016), it works both ways – the schools and the parents are able to save some amount because schools can reduce its workforce and reduce on overhead cost and the parents don't need to send their children to schools which is also very costly. Distance learning, within the context of the pandemic, uses a broader spectrum of technologies – from printed materials to online access.

In Bacolod City College, all kinds of learning modalities are utilized to allow students a wider range of options for their distant education. There are students who preferred self-learning modules due to internet connectivity issues while some preferred online classes because they find it easy to work on. To some, blended learning is best because they need to have a fallback when internet connection is not or is poorly working. The researcher, being a college instructor for more than a decade, is suddenly forced to work on these three (3) modalities to be able to keep with the learners' educational needs. However, it has been her experience that in any learning modality – all new to

teachers – there is a need for teachers' training, particularly in the utilization of online classes and blended learning. Even with modular learning, access to online teaching resources has been a bit of a challenge. These issues motivated the researcher in conducting this study. It is her desire to help determine what other challenges were encountered by her fellow teachers in tertiary level in the delivery and utilization of various learning modalities. The researcher believes that it is in identifying these challenges that success can be achieved.

Current State of Knowledge

These days, there is a move toward modular approach to curriculum implementation. The approach has drawn a special attention in most nations' education system particularly in technical and vocational education and higher education of Ethiopia asserted that there has been an increasing focus on modular approach of learning in higher education institutions. Modular approach is an emerging trend educational thinking that shifts traditional method of instruction to an outcome-based learning paradigm (Dejene, et al., 2019).

Moreover, the very essence of modularization is that students are at center of the teaching-learning process. It calls for a classroom environment in which students are actively engaged in knowledge construction process and a shift in the role of instructor from knowledge transmitter to a facilitator of students' learning. Not only that, modularization requires continuous follow-up and assessment of students' progress throughout the module/course. The practice of effective continuous assessment allows instructors making adjustments to teaching and learning in response to assessment evidence. This also helps students receive feedback about their learning with advice on what they can do to improve. In other words, the implementation modularized curriculum shall ensure the realization of active learning and continuous assessment in higher education institutions of Ethiopia.

Dejene (2019) assessed the implementation of modularization in Ethiopian higher education institutions with particular reference to the instructional process. The study found out that the instructional process in the modularized program is below the expectation. The teaching-learning process was found to be predominately teacher-centered and limited to PowerPoint presentations. Students were still found as an outsider in the process of knowledge construction playing a recipient role. It was also found that continuous assessment has continued to be perceived and practiced as continuous testing in which students sat for tests and quizzes frequently with no written and/or oral feedback.

In Indonesia, students continue their education through online learning and via video calls with their teachers, especially in big cities such as Jakarta. The model is currently the best alternative as keeping schools open poses a safety risk for students. As a student participating in the home-learning program, online school was confusing to adjust to as we had not been prepared through simulations or practices beforehand. Students reported the home-learning program to be even more stressful than regular classrooms. Some of the common reasons for this went along the lines of: "Normal classes may have been difficult, but having friends makes it so much more manageable and less stressful. Online classes take out the benefits of having friends to socialize with and being stuck alone with nothing but assignments" (Angdhiri, 2020).

Karal, et al. (2019), determine the problems faced by students taking an online exam during a graduate degree program administered by the Distance Education Research and Application Center, KTU (Karadeniz Technical University). The data obtained from e-mails of students about problems in the exam process are analyzed descriptively. The data were read twice by different researchers and then organized in codes. Themes that were revealed as a result of the compilation of encodings were put into a meaningful structure to be presented to the reader. The results showed that the following problems occurred in the process of the students taking the online exams, the students' level of computer literacy, the test environment being new to the students, the presentation of the questions in a computer environment and technical difficulties. The students' ability to use a computer is an important factor in the emergence of problems. The main outcome of the research was the need for an orientation program which will assist the students taking online exams and the online courses.

According to the study sponsored by the European Union (2020), Technology does come with its drawbacks. Devices crashing without warning, the internet connection dropping and platforms freezing can spell disaster for lessons, especially when the teacher is covering important information or when students are at a crucial point in their courses. The same can be said when either the teacher or the student has just started their course and have not set aside adequate time to check how the platform works. Being unfamiliar with the software can create unnecessary delays that impact negatively on the learning experience. This can be combatted by reading up on the user guides and making sure functionality has been tested before lessons begin.

According to O'Keefe, students and teachers at all levels of education are transitioning from classroom to computer as the number of confirmed Covid-19 cases continues to rise. Not every subject lends itself to a smooth transition to distance learning, as students and instructors have discovered. Students are now meeting remotely through Zoom, a video conferencing platform. Zoom allows students to meet virtually during a time when people can't meet physically, but distance learning poses challenges for courses that require more than a lecture, like art classes and lab components of science classes who are needing industrial grade equipment.

Teachers who do not fully embrace technological changes and advancements may find it a struggle to work well in an online environment. The online approach to teaching needs to be something the teacher is feeling confident and positive about if they are to succeed; entering an online environment feeling anxious about, irritated by or steadfastly against technology will only cause more problems. It is best to remember that the use of technology will

continue to grow in educational settings and the time to avoid it has truly passed. Learning to use a range of technology can benefit a teacher's CV and make them more attractive to job roles in the future (EU, 2020).

Both online and offline teaching environments offer a range of benefits and challenges, so choosing which one is right for you can be hard. Teachers should consider the information in this blog post, as well as their working lives, personal lives and personal preferences, to help them decide which route is best for them. For teachers who prefer to work in a traditional classroom environment, it is still worth considering implementing more technology to enhance the learning journey – technology will continue to become a more essential teaching tool, regardless of whether the teacher feels positive about this or not (Goodwin, 2017).

Theoretical Framework

This study which is focused on the challenges encountered by tertiary teachers in the utilization of different learning modalities was anchored on the theory of optimal challenges by Robert Yerkes and John Dodson (1908).

Yerkes and Dodson's theory of Optimal Challenges suggests that there is a need for an optimal level of arousal for the best performance in learning tasks. Ideally, the instructors' expectations should match the abilities and inabilities of students. The theory of Sustained Optimal Challenges by Yerkes-Dodson sought to explain phenomena and provide a means of scientific explanation how challenges in modular teaching affects the over-all productivity of teachers.

This theory greatly works for this study because the challenges encountered by tertiary teachers in the utilization of different learning modalities comes in many forms and different extents. It is expected that the greater the challenges faced by teachers, the more they will end up as experienced handlers of modular learning and other learning modalities.

The theory of sustained optimal challenges facilitates teachers' abilities by achieving primarily the following objectives: continually adjusts the speed and content difficulty levels over the course of teaching and learning; matches the instructors' expectations with the students' aptitudes (abilities and inabilities); and finally, reduces the variation in student learning. The effect of central limit theorem, teaching and learning theories, learning outcomes, and student feedback supported the proposed theory in a wide range of disciplines, including, Statistics, Mechanics, Quality, and Ergonomics. Sustained optimal challenges were observed in most courses taught utilizing the proposed theory.

Furthermore, this theory seeks to explain how challenges in modular teaching helps identify the corresponding strength of each teacher to overcome said challenges.

Objectives of the Study

This study aimed to determine the degree of challenges encountered by tertiary teachers in the utilization of different learning modalities: basis for an enhancement plan in one of the city colleges in Central Philippines for the School Year 2020-2021.

Methodology:

This section deals with the research design, the respondents, research instrument, as well as the validity and reliability of the research, data gathering procedure and the statistical tools that will be used in analyzing the data.

Research Design

This study employed descriptive research design as it aimed to describe the challenges encountered by tertiary teachers in the utilization of different learning modalities: basis for enhanced distant learning strategies in Bacolod City College for the School Year 2020-2021.

According to Lawler, (2016) stated that the descriptive method is used in a research study if it involves the description, recording, analysis, and interpretation of the present nature, composition or processes of phenomena which focuses on prevailing conditions, or how a person, group or thing behaves or functions in the present.

Descriptive research studies are conducted to describe systematically and accurately the facts and characteristics of a given population or area of interest, to provide an accurate portrayal or account of characteristics of a particular individual (Dulock, 2015). This method is the most appropriate because the study involves the description of the challenges encountered by tertiary teachers in the utilization of different learning modalities.

Respondents of the Study

The respondents of the study were the 60 actively employed tertiary teachers from the 6 departments of the said tertiary school. Since the total number of respondents is quite manageable, total enumeration was employed. Total enumeration sampling is a research method that involves studying the entire population of interest, while purposive

sampling is a method that involves selecting a specific group of people to study. Total enumeration sampling is also known as census sampling (Steffy, 2020).

Data Gathering Instruments

This study utilized a self-made questionnaire in gathering the necessary data, mainly from the 6 different departments of Bacolod City College. The questionnaire was divided into 2 parts: Part 1 contained personal information of respondents' demographic profile such as age, sex and department while Part 2 is the survey proper on the extent of challenges encountered by tertiary teachers in the utilization of different learning modalities with 30-line items questions, 10-line items per area. The questionnaires were gathered and the results recorded, analyzed and treated. The respondents were asked to rate each item using the five-point Likert's scale which contains the following scores: 5 – almost; 4 – sometimes; 3 – oftentimes; 2 – rarely and 1 – almost never.

Validity

Validity is the level to which the interpretations of the results of a test are warranted, which depends on the particular use the test is intended to serve (Shields, 2015). For this study, 3 validators were selected and requested to validate the research instrumentation. The items in the questionnaires were presented to the three experts in the field of education and research. The suggestions and recommendations of the said experts were incorporated in the final copy of the questionnaire.

To determine the validity of the research instrument, the researcher adapted the criteria developed for the evaluation of survey questionnaires set forth by Carter V. Good and Douglas E. Scates. The interpretations will be as follows: Excellent (4.04 – 5.00); Very Good (3.28 – 4.03); Good (2.52 – 3.27); Poor (2.52 – 3.27); Very Poor (1.00 – 1.75). The average rating of the three rating from the validators will be averaged to determine whether the said instrument is valid or not. The validation score of the instrument used in this study is 4.82, interpreted as "excellent" which means that the instrument is highly valid.

Reliability

Reliability estimates evaluate the stability of measures, internal consistency of measurement instruments, and interrater reliability of instrument scores. Validity is the level to which the interpretations of the results of a test are warranted, which depends on the particular use the test is intended to serve (Usman, 2016).

Since the research instrument is self-made, the reliability was established. To establish the reliability of the research instrument, the Cronbach Alpha will be used. The Cronbach Alpha is used whenever the researcher has items that are not scored simply as right or wrong (Santos, 2016). Cronbach Alpha is a measure of internal consistency, that is, how closely related a set of items are as a group. It is considered to be a measure of scale reliability. A "high" value for alpha does not imply that the measure is unidimensional.

Reliability was established through a dry-run from 30 tertiary teachers in a nearby city college. The said respondents for the reliability test are not part of the actual respondents of this study. The reliability index must be 0.70 or higher, to make sure that the data gathering instrument is within a high level of reliability.

The Reliability Index for this instrument was 0.873, interpreted as "good", this means that instrument is reliable.

Data Gathering Procedure

There was a letter request addressed to the School President requesting permission to conduct the study within the school. The approved copy furnished to college deans. After securing the approval for the request, data gathering instrument was distributed to target respondents. The hard copy of the data gathering instrument were forwarded to the respondents through the Dean's office. The data gathered from the responses of the respondents were tallied and tabulated using the appropriate statistical tools. The raw data were transformed into numerical code guided by a coding manual. This allowed computer processing, statistical derivations and tabular presentation.

Research Ethics Protocol

Participants' personal demographic information results were collected and were noted in the data capturing sheet. Informed consent via verbal communication was elicited with the respondents. They read and understood the provided information and can ask questions. Moreover, their participation was voluntary, and they were free to withdraw without giving any reasons. The respondents were assured that there would be no risks of harm will experience before, during, or after participating in the research. The data and information used in the study were treated with strict confidentiality. No statement regarding the participant's identity was disclosed unnecessarily in

this study. After the data gathering, since there was no need, debriefing was not done by the researcher anymore, as cited in the Data Privacy Act.

Analytical Schemes

In the analysis of the data, various statistical procedures were employed based on the objectives of the study.

Objective No. 1 used descriptive analytical scheme to determine the profile of the respondents in terms of age, sex, and department.

Objective No. 2 also used descriptive analytical scheme to determine the extent of challenges encountered by tertiary teachers in the utilization of different learning modalities in the areas of self-learning modules, online learning and blended learning.

Objective No. 3 still used descriptive analytical scheme to determine the extent of challenges encountered by tertiary teachers in the utilization of different learning modalities when they are grouped according to aforementioned variables.

Objective No. 4 used comparative analytical scheme to determine the significant difference in the extent of challenges encountered by tertiary teachers in the utilization of different learning modalities when they are grouped and compared according to aforementioned variables.

Results and Discussion:

This section presents the findings, statistical analysis, and interpretation of the data gathered concerning the study's objectives.

Profile of the Respondents in Terms of Age, Sex, and Department

Table 2
Profile of the Respondents

Variables	Categories	Frequency	Percentage
Age	Younger (less tha 42 years old)	31	51.67
	Older (42 years old and above)	29	48.33
	Total	60	100
Sex	Male	17	28.33
	Female	43	71.67
	Total	60	100
Department	Elementary Education	20	33.33
	Secondary Education	16	26.67
	Business Education	13	21.67
	Information Aystem	11	18.33
	Total	60	100

Table 2 presents the profile of the respondents in terms of age, sex, and department. Findings revealed that, younger respondents aged below 42 years old with 51.67% slightly outnumber older respondents aged 42 years old and above obtaining 48.33% of the respondents, indicating a nearly equal distribution. In terms of sex, the majority of respondents are female, comprising 71.67%, while males make up only 28.33%. This suggests that the teaching profession in the sample is female-dominated.

Regarding the department, respondents are distributed across four fields: Elementary Education has the highest representation at 33.33%, followed by Secondary Education at 26.67%, Business Education at 21.67%, and Information System at 18.33%. This indicates a diverse respondent pool, with the largest share from the Elementary Education department.

These findings imply that the sample consists of a balanced mix of younger and older professionals, with a significant female representation. The respondents also come from various academic fields, with a stronger presence in Elementary and Secondary Education.

Degree of challenges encountered by tertiary teachers in the utilization of different learning modalities in the following areas of Self-Learning Modules, Online Learning, and Blended Learning

Table 3

Degree of challenges encountered by tertiary teachers in the utilization of different learning modalities in the area of Self-Learning Modules

Items	Mean	Interpretation
As a teacher, I am challenged ...		
1. in sourcing lesson contents.	2.12	Low Degree
2. in getting updated soft copies of specific subject-contents from my department.	2.27	Low Degree
3. in printing hard copies of SLMs	2.38	Low Degree
4. with module distribution.	2.18	Low Degree
5. in providing amplified instructions due to students' attendance.	2.38	Low Degree
6. in collecting used/unused hard copies of SLMs.	2.18	Low Degree
7. getting a final approval for my SLM prior to its distribution.	2.25	Low Degree
Overall Mean	2.25	Low Degree

Table 3 revealed the Degree of challenges encountered by tertiary teachers in utilizing Self-Learning Modules with the overall mean of 2.25, interpreted as a "Low Degree" of challenge. This indicates that teachers generally do not experience major difficulties in using Self-Learning Modules. The highest mean of 2.38 was recorded for items 3 "printing hard copies of SLMs" and 5 "providing amplified instructions due to students' attendance", while the lowest mean of 2.12 was obtained by item 1 "in sourcing lesson contents" both were interpreted as "Low Degree".

These implies that tertiary teachers face minimal challenges in utilizing Self-Learning Modules. Although they are still manageable, printing and student attendance appear to be the most significant challenge. Printing issues may arise due to limited resources, while attendance-related challenges may affect how well students receive additional instructions.

The study on Challenges and Benefits of Blended Learning on Tertiary Education ESL Classrooms: A Literature Review supports findings of this study as it revealed not just students, but teachers also are having difficulties in managing the technology during blended learning. Other major challenges of blended learning that most learners and educators are experiencing are poor facilitating conditions or skills in using technology as well as insufficient facilities that will give a huge impact on learners' learning process (Amiruddin, et. al., 2022).

Table 4

Degree of challenges encountered by tertiary teachers in the utilization of different learning modalities in the area of Online Learning

Items	Mean	Interpretation
As a teacher, I am challenged ...		
1. in holding a consistent online class due to my internet connection.	2.37	Low Degree
2. getting all students to my online class due to some student's poor connectivity.	2.27	Low Degree
3. students' behavior during online classes.	2.33	Low Degree
4. in accessing the school's LMS.	2.27	Low Degree
5. providing online learning materials due to the consistency of students' internet connection.	2.02	Low Degree
6. with students' overall attendance in online classes.	2.18	Low Degree
7. in providing collaborative learning strategies.	2.33	Low Degree
Overall Mean	2.25	Low Degree

The overall mean for the Degree of challenges encountered by tertiary teachers in utilizing Online Learning is 2.25, interpreted as a "Low Degree". The highest mean of 2.37 was revealed by item 1 "holding a consistent online class due to my internet connection", while the lowest mean of 2.02 was shown in item 5 "providing online learning materials due to the consistency of students' internet connection".

This indicates that teachers typically do not face significant challenges when teaching online. Internet stability is the most common issue among teachers, though still considered a minor challenge, implying that teachers may struggle with unstable internet connections, which can disrupt online classes.

In support, the study entitled "Challenges and Opportunities of Online Learning Modality: Experiences of Social Science College Teachers in a Philippine Private School" revealed that loss/lack of internet connections is a challenge among our educators in online platforms, considering that here in the Philippines in general, cellular network infrastructures are limited. Cellular network towers are concentrated in urban areas, while in far-flung rural

areas, these are limited. Consequently, searching for electronic materials for research work, finding related readings, watching educational videos, or simply accessing teachers' uploaded modules is impossible to experience. This leads to multiple problems such as loss of interest, irritability, or boredom (Madrigal, et. al. (2021).

Table 5

Degree of challenges encountered by tertiary teachers in the utilization of different learning modalities in the area of Blended Learning

Items	Mean	Interpretation
As a teacher, I am challenged ...		
1. the common choice of the majority of students.	2.27	Low Degree
2. the school guidelines as to when to used online vs SLM.	2.38	Low Degree
3. online sessions because of weather disturbances affecting internet connection of students.	2.33	Low Degree
4. poor assessment results when using SLM's without proper face-to-face instructions.	2.18	Low Degree
5. gathering all activity sheets in one time.	2.27	Low Degree
6. cascading to students when to have SLMs versus online versus face-to-face learning.	2.38	Low Degree
7. tabulating students' attendance sheets using mixed learning methods.	1.90	Low Degree
Overall Mean	2.25	Low Degree

As presented in Table 5, overall mean for the Degree of challenges encountered by tertiary teachers in Blended Learning is 2.25, interpreted as "Low Degree" of challenge. The highest mean of 2.38 was recorded for items 2 "the school guidelines as to when to use online vs. SLM" and 6 "cascading to students when to have SLMs versus online versus face-to-face learning", while the lowest mean of 1.90 was for item 7 "tabulating students' attendance sheets using mixed learning methods" bothe interpreted as "Low Degree".

This implies that teachers generally find blended learning manageable. However, the biggest challenge would be making sure that the school's blended learning policies are clear and that schedules are communicated clearly. This challenge could stem from the lack of standardized implementation guidelines, leading to confusion among both teachers and students. Frequent adjustments to learning modes, inconsistent school policies, and varying internet access among students may further complicate scheduling and coordination. Additionally, it may be more challenging for educators to effectively communicate important updates in the absence of a centralized communication infrastructure.

As revealed in the study of Alvarez (2020) entitled on Learning from the problems and challenges in blended learning: Basis for faculty development and program enhancement, one of the challenges of teachers in the blended learning is instructional roadblock which implies poor instructional policies and assessment guidelines that barricade facilitators to engage in designing, implementing, and assessing blended learning activities. It highlighted the lack of instructional needs assessment plan which limits students' needs and confined in one-size-fits-all form of teaching resources.

Degree of challenges encountered by tertiary teachers in the utilization of different learning modalities in the area of Self-Learning Modules, Online Learning, and Blended Learning when grouped according to Age, Sex, and Department

Table 6

Degree of challenges encountered by tertiary teachers in the utilization of different learning modalities in the area of Self-Learning Modules, when grouped according to Age

Items	Younger		Older	
	Mean	Interpretation	Mean	Interpretation
As a teacher, I am challenged ...				
1. in sourcing lesson contents.	2.10	Low Degree	2.14	Low Degree
2. in getting updated soft copies of specific subject-contents from my department.	2.32	Low Degree	2.21	Low Degree
3. in printing hard copies of SLMs	2.19	Low Degree	2.59	Moderate Degree
4. with module distribution.	2.19	Low Degree	2.17	Low Degree
5. in providing amplified instructions due to students' attendance.	2.42	Low Degree	2.34	Low Degree
6. in collecting used/unused hard copies of SLMs.	2.29	Low Degree	2.07	Low Degree
7. getting a final approval for my SLM prior to its distribution.	2.16	Low Degree	2.34	Low Degree
Overall Mean	2.24	Low Degree	2.27	Low Degree

The Degree of challenges encountered by tertiary teachers in using self-learning modules showed overall means of 2.24 for younger teachers and 2.27 for older teachers, both interpreted as "Low Degree". For younger teachers, the highest mean of 2.42 was on item 5, "providing amplified instructions due to students' attendance," while the lowest mean of 2.10 was on item 1, "sourcing lesson contents," both interpreted as "Low Degree". On the other hand, older teachers obtained the highest mean of 2.59 on item 3, "Printing hard copies of SLMs," interpreted as "Moderate Degree", while the lowest mean of 2.07 was on item 6, "Collecting used/unused hard copies of SLMs," interpreted as "Low Degree".

The results indicate that both younger and older teachers generally experience a low Degree of challenges in using self-learning modules, suggesting that they are relatively capable of handling SLM-related tasks. However, older teachers reported a moderate Degree of difficulty in printing hard copies of SLMs, which could be attributed to limited knowledge of older teachers in terms of printing process.

Table 7

Degree of challenges encountered by tertiary teachers in the utilization of different learning modalities in the area of Online Learning when grouped according to Age

Items	Younger		Older	
	Mean	Interpretation	Mean	Interpretation
As a teacher, I am challenged ...				
1. in holding a consistent online class due to my internet connection.	2.42	Low Degree	2.31	Low Degree
2. getting all students to my online class due to some student's poor connectivity.	2.35	Low Degree	2.17	Low Degree
3. students' behavior during online classes.	2.42	Low Degree	2.24	Low Degree
4. in accessing the school's LMS.	2.16	Low Degree	2.38	Low Degree
5. providing online learning materials due to the consistency of students' internet connection.	2.03	Low Degree	2.00	Low Degree
6. with students' overall attendance in online classes.	2.10	Low Degree	2.28	Low Degree
7. in providing collaborative learning strategies.	2.23	Low Degree	2.45	Low Degree
Overall Mean	2.24	Low Degree	2.26	Low Degree

Table 7, on the Degree of challenges encountered by tertiary teachers in using online learning revealed the overall means of 2.24 for younger teachers and 2.26 for older teachers, both interpreted as "Low Degree". For younger teachers, the highest mean of 2.42 was recorded in items 1 "in holding a consistent online class due to my internet connection" and 3 "students' behavior during online classes", both were interpreted as "Low Degree". For older teachers, the highest mean of 2.45 was on item 7, "providing collaborative learning strategies". The lowest mean was obtained by item 5, "providing online learning materials due to the consistency of students' internet connection," for younger teachers with the mean of 2.03, while on older teachers, it was 2.00, both interpreted as "Low Degree".

This implies that while both younger and older teachers face minimal challenges in online learning, older teachers reported slightly more difficulty in providing collaborative learning strategies. This could be due to the shift from traditional face-to-face group activities to virtual collaboration, where tools and platforms may not fully replicate the engagement of physical interaction.

In the study of Alvarez (2020) on Learning from the problems and challenges in blended learning: Basis for faculty development and program enhancement, it revealed the theme collaboration roadblock as one of the challenges of teachers in facilitating Blended Learning. This theme is described as limited to lack of interaction between teacher-student and student-student due to poor utilization of technology-enabled communication tools. It was emphasized the teacher and student interaction as limited in time of exchanging information.

Table 8

Degree of challenges encountered by tertiary teachers in the utilization of different learning modalities in the area of Blended Learning when grouped according to Age

Items	Younger		Older	
	Mean	Interpretation	Mean	Interpretation
As a teacher, I am challenged ...				
1. the common choice of the majority of students.	2.19	Low Degree	2.34	Low Degree

2. the school guidelines as to when to used online vs SLM.	2.32	Low Degree	2.45	Low Degree
3. online sessions because of weather disturbances affecting internet connection of students.	2.35	Low Degree	2.31	Low Degree
4. poor assessment results when using SLM's without proper face-to-face instructions.	2.03	Low Degree	2.34	Low Degree
5. gathering all activity sheets in one time.	2.06	Low Degree	2.48	Low Degree
6. cascading to students when to have SLMs versus online versus face-to-face learning.	2.35	Low Degree	2.41	Low Degree
7. tabulating students' attendance sheets using mixed learning methods.	2.03	Low Degree	1.76	Low Degree
Overall Mean	2.19	Low Degree	2.30	Low Degree

Statistics in Table 8 reflects the Degree of challenges encountered by tertiary teachers in using blended learning. It showed overall means of 2.19 for younger teachers and 2.30 for older teachers, both interpreted as "Low Degree". For younger teachers, the highest mean of 2.35 was recorded on items 3 "online sessions because of weather disturbances affecting internet connection of students" and 6 "Cascading to students when to have SLMs versus online versus face-to-face learning", both were interpreted as "Low Degree". For older teachers, the highest mean of 2.48 was on item 5, "gathering all activity sheets in one time," also interpreted as "Low Degree". The lowest mean for younger teachers was 2.03 on items 4 "poor assessment results when using SLM's without proper face-to-face instructions" and 7, "Tabulating students' attendance sheets using mixed learning methods.", while for older teachers, the lowest mean was 1.76 on item 7. All were interpreted as "Low Degree".

This implies that while teachers generally find blended learning manageable, older teachers experience the most difficulty in gathering all activity sheets in one time. This challenge reveal the older teachers may find it hard to handle complex and multiple learning modalities where students submit outputs through various platforms at different times. Additionally, inconsistent submission schedules, technical issues, and students' varying access to resources may further contribute to the difficulty of older teachers.

Findings of the supports the study of Alvarez (2020) entitled as "Learning from the problems and challenges in blended learning: Basis for faculty development and program enhancement". The study revealed a theme Technological roadblock as perceived to be a challenge for some participants which shows that the use of technology in teaching and learning becomes a hindrance or a barrier for the teachers to deliver their instruction, considering the need to use a LMS. In fact, this becomes problematic, and it is seen to be technical; thus, it results to difficulty and confusion on instructional design and development. Likewise, the absence of assessment guidelines for blended learning activities made it also difficult to assess the outputs submitted by the students.

Table 9

Degree of challenges encountered by tertiary teachers in the utilization of different learning modalities in the area of Self-Learning Modules, when grouped according to Sex

Items	Male		Female	
As a teacher, I am challenged ...	Mean	Interpretation	Mean	Interpretation
1. in sourcing lesson contents.	2.41	Low Degree	2.00	Low Degree
2. in getting updated soft copies of specific subject-contents from my department.	2.29	Low Degree	2.26	Low Degree
3. in printing hard copies of SLMs	2.35	Low Degree	2.40	Low Degree
4. with module distribution.	2.18	Low Degree	2.19	Low Degree
5. in providing amplified instructions due to students' attendance.	2.35	Low Degree	2.40	Low Degree
6. in collecting used/unused hard copies of SLMs.	2.00	Low Degree	2.26	Low Degree
7. getting a final approval for my SLM prior to its distribution.	2.12	Low Degree	2.30	Low Degree
Overall Mean	2.24	Low Degree	2.26	Low Degree

Findings in Table 9 shows the Degree of challenges encountered by tertiary teachers in utilizing Self-Learning Modules. The overall means of 2.24 was obtained by male teachers and 2.26 for female teachers, both interpreted as "Low Degree". In Addition, male teachers, got the the highest mean of 2.41 on item 1, "in sourcing lesson contents,", while female teachers, got the highest mean of 2.40 on items 3 "in printing hard copies of SLMs" and 5 "in providing amplified instructions due to students' attendance", both were interpreted as "Low Degree". The lowest

mean of 2.00 interpreted as "Low Degree" was obtained by male teachers on item 6, "In collecting used/unused hard copies of SLMs", while female teachers was on item 1, "In sourcing lesson contents".

The implies that though manageable, male teachers experience the most difficulty in sourcing lesson contents, which may be caused by limited access to updated instructional materials or a lack of resources for subject-specific content.

In support, the study of Madrigal, et. al. (2021) on the Challenges and Opportunities of Online Learning Modality: Experiences of Social Science College Teachers in a Philippine Private School, revealed that confusion and adjustments are a challenge among educators because some are not ready since they lack proper training, familiarity, preparations in terms of time, learning content. Likewise, others felt emotional inadequacy since they cannot tackle online issues such as inappropriate comments from students. Online instructions further require users on the mastery of Learning Management System such as Google Classroom, Edmodo, and Schoology that is used to manage the teaching-learning process. Learning content must be adequate, coherent, interdisciplinary, and grammatical error-free. In ensuring quality, teachers should ensure precision and that the sources are valid and reliable.

Table 10

Degree of challenges encountered by tertiary teachers in the utilization of different learning modalities in the area of Online Learning when grouped according to Sex

Items	Male		Female	
	Mean	Interpretation	Mean	Interpretation
As a teacher, I am challenged ...				
1. in holding a consistent online class due to my internet connection.	2.59	Moderate Degree	2.28	Low Degree
2. getting all students to my online class due to some student's poor connectivity.	2.47	Low Degree	2.19	Low Degree
3. students' behavior during online classes.	2.41	Low Degree	2.30	Low Degree
4. in accessing the school's LMS.	2.29	Low Degree	2.26	Low Degree
5. providing online learning materials due to the consistency of students' internet connection.	2.06	Low Degree	2.00	Low Degree
6. with students' overall attendance in online classes.	2.18	Low Degree	2.19	Low Degree
7. in providing collaborative learning strategies.	2.24	Low Degree	2.37	Low Degree
Overall Mean	2.32	Low Degree	2.23	Low Degree

The Degree of challenges encountered by tertiary teachers in utilizing online learning showed overall means of 2.32 for male teachers and 2.23 for female teachers, both interpreted as "Low Degree". Moreover, male teachers, showed the highest mean of 2.59, interpreted as "Moderate Degree" on item 1 "in holding a consistent online class due to my internet connection", while female teachers, the highest mean of 2.37, interpreted as "Low Degree", and was on item "in providing collaborative learning strategies". Item 5, "Providing online learning materials due to the consistency of students' internet connection." got the lowest mean of 2.06 for male teachers, and 2.00 for female teachers, both interpreted as "Low Degree".

The results indicate that male teachers experience a moderate challenge in maintaining a stable online class due to internet connectivity issues. This could be due to differences in location, availability of reliable internet providers, or personal technological resources.

Table 11

Degree of challenges encountered by tertiary teachers in the utilization of different learning modalities in the area of Blended Learning when grouped according to Sex

Items	Male		Female	
	Mean	Interpretation	Mean	Interpretation
As a teacher, I am challenged ...				
1. the common choice of the majority of students.	2.12	Low Degree	2.33	Low Degree
2. the school guidelines as to when to used online vs SLM.	2.53	Moderate Degree	2.33	Low Degree
3. online sessions because of weather disturbances affecting internet connection of students.	2.35	Low Degree	2.33	Low Degree
4. poor assessment results when using SLM's without proper face-to-face instructions.	2.41	Low Degree	2.09	Low Degree

5. gathering all activity sheets in one time.	2.29	Low Degree	2.26	Low Degree
6. cascading to students when to have SLMs versus online versus face-to-face learning.	2.47	Low Degree	2.35	Low Degree
7. tabulating students' attendance sheets using mixed learning methods.	2.18	Low Degree	1.79	Low Degree
Overall Mean	2.34	Low Degree	2.21	Low Degree

Table 11 presents the Degree of challenges encountered by tertiary teachers in utilizing blended learning. As revealed the means of 2.34 for male teachers and 2.21 for female teachers, were both interpreted as "Low Degree". In addition, male teachers got the highest mean of 2.53, interpreted as "Moderate Degree" on item 2 "the school guidelines as to when to use online vs. SLM.", while female teachers, got the highest mean of 2.35, interpreted as "Low Degree" on item 6 "cascading to students when to have SLMs versus online versus face-to-face learning.". The lowest mean for male teachers was 2.12 on item 1, "The common choice of the majority of students.", while the lowest mean for female teachers was 1.79 on item 7, "Tabulating students' attendance sheets using mixed learning methods.", both interpreted as "Low Degree".

The results imply that male teachers experience a moderate challenge in understanding and implementing the school's blended learning guidelines, which may stem from unclear policies, frequent adjustments, or a lack of standardized procedures. This could lead to confusion in determining when to use online learning versus self-learning modules, affecting the smooth delivery of lessons.

Table 12

Degree of challenges encountered by tertiary teachers in the utilization of different learning modalities in the area of Self-Learning Modules, when grouped according to Department

Items	Elementary Ed		Secondary Ed		Business Ed		Info. System	
	M	Int.	M	Int.	M	Int.	M	Int.
As a teacher, I am challenged ...								
1. in sourcing lesson contents.	2.10	Low Degree	1.94	Low Degree	2.08	Low Degree	2.45	Low Degree
2. in getting updated soft copies of specific subject-contents from my department.	2.25	Low Degree	2.19	Low Degree	2.38	Low Degree	2.27	Low Degree
3. in printing hard copies of SLMs	2.45	Low Degree	2.44	Low Degree	2.46	Low Degree	2.09	Low Degree
4. with module distribution.	2.20	Low Degree	2.25	Low Degree	1.92	Low Degree	2.36	Low Degree
5. in providing amplified instructions due to students' attendance.	2.40	Low Degree	2.31	Low Degree	2.46	Low Degree	2.36	Low Degree
6. in collecting used/unused hard copies of SLMs.	2.30	Low Degree	2.13	Low Degree	2.23	Low Degree	2.00	Low Degree
7. getting a final approval for my SLM prior to its distribution.	2.20	Low Degree	2.56	Moderate Degree	2.23	Low Degree	1.91	Low Degree
Overall Mean	2.27	Low Degree	2.26	Low Degree	2.25	Low Degree	2.21	Low Degree

As revealed in Table 12, Degree of challenges encountered by tertiary teachers in utilizing self-learning modules showed overall means of 2.27 for Elementary Education, 2.26 for Secondary Education, 2.25 for Business Education, and 2.21 for Information Systems, all interpreted as "Low Degree". Among the departments, the highest mean recorded was 2.56 "Moderate Degree" in Secondary Education for item 7 "getting a final approval for my SLM prior to its distribution.", which also got the lowest mean recorded of 1.91 in Information Systems interpreted as "Low Degree".

Findings imply that secondary education teachers face the most difficulty in securing final approval for SLMs, likely due to stringent review processes, administrative delays, or lack of clarity in approval guidelines. This may slow down the distribution of materials and affect lesson delivery timelines.

Table 13

Degree of challenges encountered by tertiary teachers in the utilization of different learning modalities in the area of Online Learning when grouped according to Department

Items	Elementary Ed		Secondary Ed		Business Ed		Info. System	
As a teacher, I am challenged ...	M	Int.	M	Int.	M	Int.	M	Int.
1. in holding a consistent online class due to my internet connection.	2.20	Low Degree	2.44	Low Degree	2.38	Low Degree	2.55	Moderate Degree
2. getting all students to my online class due to some student's poor connectivity.	2.20	Low Degree	2.31	Low Degree	2.00	Low Degree	2.64	Moderate Degree
3. students' behavior during online classes.	2.40	Low Degree	2.31	Low Degree	2.31	Low Degree	2.27	Low Degree
4. in accessing the school's LMS.	2.35	Low Degree	2.00	Low Degree	2.38	Low Degree	2.36	Low Degree
5. providing online learning materials due to the consistency of students' internet connection.	1.80	Low Degree	2.06	Low Degree	2.23	Low Degree	2.09	Low Degree
6. with students' overall attendance in online classes.	2.25	Low Degree	2.25	Low Degree	2.08	Low Degree	2.09	Low Degree
7. in providing collaborative learning strategies.	2.55	Moderate Degree	2.44	Low Degree	2.08	Low Degree	2.09	Low Degree
Overall Mean	2.25	Low Degree	2.26	Low Degree	2.21	Low Degree	2.30	Low Degree

The Degree of challenges encountered by tertiary teachers in the utilization of online learning when grouped according to department shows an overall mean of 2.25 for Elementary Education, 2.26 for Secondary Education, 2.21 for Business Education, and 2.30 for Information Systems, all interpreted as "Low Degree". Among the respondents, the highest mean of 2.64, interpreted as "Moderate Degree," was observed in item 2 "getting all students to my online class due to some student's poor connectivity." for Information System, and 2.55 on item 7 "in providing collaborative learning strategies." For Elementary Education also interpreted as "Moderate Degree". Meanwhile the lowest mean of 1.80 interpreted as "Low Degree" was obtained by item 5 "providing online learning materials due to the consistency of students' internet connection." for Elementary Education.

This implies that faculty members in the Information Systems department face greater challenges in ensuring student attendance in online classes, likely due to disparities in students' internet access and reliability. On the other hand, Elementary Education teachers experience more difficulty in implementing collaborative learning strategies, which may stem from the limitations of online platforms in fostering interactive and engaging group activities.

Findings confirm with the study of Cabatac et. al. (2024) on Challenges and Adjustment Strategies of Tertiary Teachers on Modular Distance Learning in Suburban Philippines which revealed that one of the challenges faced by the tertiary teachers are hardships in communicating well with students which resulted to lack of student-teacher interaction and insufficient teaching of skills and performances. Along with these challenges, participants employed some adjustment strategies to cope with the drastic change in education which included recognizing the value of time and utilizing different communication platforms to reach-out to students.

Table 14

Degree of challenges encountered by tertiary teachers in the utilization of different learning modalities in the area of Blended Learning when grouped according to Department

Items	Elementary Ed	Secondary Ed	Business Ed	Info. System
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	M	Int.	M	Int.	M	Int.	M	Int.
As a teacher, I am challenged ...								
1. the common choice of the majority of students.	2.20	Low Degree	2.44	Low Degree	2.23	Low Degree	2.18	Low Degree
2. the school guidelines as to when to use online vs SLM.	2.20	Low Degree	2.38	Low Degree	2.46	Low Degree	2.64	Moderate Degree
3. online sessions because of weather disturbances affecting internet connection of students.	2.20	Low Degree	2.50	Moderate Degree	2.23	Low Degree	2.45	Low Degree
4. poor assessment results when using SLM's without proper face-to-face instructions.	2.25	Low Degree	2.00	Low Degree	2.00	Low Degree	2.55	Moderate Degree
5. gathering all activity sheets in one time.	2.25	Low Degree	2.31	Low Degree	2.38	Low Degree	2.09	Low Degree
6. cascading to students when to have SLMs versus online versus face-to-face learning.	2.35	Low Degree	2.38	Low Degree	2.38	Low Degree	2.45	Low Degree
7. tabulating students' attendance sheets using mixed learning methods.	1.65	Low Degree	2.06	Low Degree	1.85	Low Degree	2.18	Low Degree
Overall Mean	2.16	Low Degree	2.29	Low Degree	2.22	Low Degree	2.36	Low Degree

Finding in Table 14 revealed that the Degree of challenges encountered by tertiary teachers in the utilization of blended learning modalities when grouped according to department is in "Low Degree" with the overall means of 2.16 for Elementary Education, 2.29 for Secondary Education, 2.22 for Business Education, and 2.36 for Information Systems. Moreover, the highest mean of 2.64, interpreted as "Moderate Degree," was found in item 2 "The school guidelines as to when to use online vs SLM." For Information system, while 2.55 also interpreted as "Moderate Degree" was noted on item 3 "online sessions because of weather disturbances affecting internet connection of students." for Secondary Education.

This implies that Information Systems teachers face more significant challenges in interpreting and adhering to school guidelines on when to use online versus self-learning modalities, likely due to the complexity of determining appropriate teaching methods for different subjects. On the other hand, teachers in the Elementary Education department face some challenges in clearly communicating the scheduling and usage of blended learning methods to students, which may result in confusion or a lack of coordination in class activities.

Comparative analysis in the Degree of challenges encountered by tertiary teachers in the utilization of different learning modalities in the areas of Self-Learning Modules, Online Learning, and Blended Learning when grouped and compared according variables to Age, Sex, and Department

Table 15

Difference in the Degree of challenges encountered by tertiary teachers in the utilization of different learning modalities in the area of Self-Learning Modules when grouped and compared according variables

Variable	Category	N	Mean Rank	Mann-Whitney U	Kruskal Wallis H	p-value	Sig. level	Interpretation
Age	Lower	31	30.65	445.000		0.946	0.05	Not Significant

Sex	Higher	29	30.34	363.500	0.974	Not Significant
	Lower	17	30.62			
	Higher	43	30.45			
Department	Elem. Ed	20	31.35	0.194	0.979	Not Significant
	Secondary Ed	16	29.25			
	Business Ed	13	31.42			
	Info. System	11	29.68			

The results presented in Table 15 show that there is no significant difference in the Degree of challenges encountered by tertiary teachers in the utilization of Self-Learning Modules when grouped according to age, sex, and department. The computed p-values for all variables were 0.946, 0.974, and 0.979 for age, sex and department respectively, are greater than the significance level of 0.05, indicating that the null hypothesis is accepted.

This implies that factors such as age, sex, and department do not significantly affect the Degree of challenges faced by teachers in utilizing Self-Learning Modules. The challenges are experienced in a similar manner across different groups, implying that these factors do not have a substantial impact on teachers' experiences with SLMs. Teachers belonging to any categories find utilization of different learning modalities in terms of Self-Learning Modules manageable.

Conclusion:

The study found a balanced mix of younger and older professionals with a significant female majority, mainly from Elementary and Secondary Education. Challenges faced by tertiary teachers in using self-learning modules, online, and blended learning were generally low and manageable, with no significant differences across age, gender, or department groups. This suggests a shared perception that these challenges are easily handled by teachers regardless of their background. To address identified issues, the study recommends creating a printing schedule and investing in a programmable heavy-duty printer to ease module production; implementing backup recorded lessons to mitigate internet disruptions; and issuing unified guidelines on the use of different learning modalities, allowing departments autonomy in their application while ensuring clear communication to all stakeholders.

Acknowledgement

First and foremost, I express my deepest gratitude to Almighty God for the wisdom, strength, and perseverance granted throughout this research. I am sincerely thankful to my research adviser and panel members for their invaluable guidance, insightful feedback, and constructive suggestions that greatly enhanced this study. I also appreciate the support from the graduate school leadership during this process. My heartfelt thanks go to the respondents for their time and cooperation, which were essential to this research. To my family and friends, especially my husband and parents, your unwavering love, motivation, and understanding have been my foundation. Lastly, I extend my gratitude to everyone who contributed to the success of this thesis—your kindness and encouragement have left a lasting impact. This accomplishment would not have been possible without all of you.

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