Teacher's Accomplishment Level of The Components of an E-Learning Module: A Basis for Teacher Training and E-Module Quality Standard Development

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Abstract: **This study determined the extent to which teachers in a private institution in La Trinidad, Benguet, Philippines have accomplished the essential components of an E-learning module, and identified the factors that influenced their level of accomplishment of these components. This study used mixed method explanatory sequential design. Total enumeration was used to determine the population of respondents who were full-time tertiary teachers. Out of the thirty-six full-time teachers, twenty-eight teachers responded and answered the self-assessment survey questionnaire for the quantitative phase, while seven of them who were selected using purposive sampling were interviewed for the qualitative part. Descriptive statistics using weighted mean was used to analyze quantitative data while descriptive approach using thematic analysis for the qualitative data. Quantitative descriptive analysis revealed that the teachers' overall accomplishment level of the criteria for a quality E-learning module is partial/moderate (2.68 overall weighted mean/WM). Specifically, the teachers partially accomplished the following components of the E-learning module: instructional design (2.84 WM); communication, interaction, and collaboration (2.85 WM); student evaluation and assessment (2.89 WM); instructional materials and technologies (2.75 WM); and accessibility (2.66 WM) while slightly accomplished the components: learner support and resources (2.21 WM), and course evaluation (2.24 WM). For the qualitative descriptive inquiry, absence of capacity-building training in making E-learning module; lack of awareness of the school services, learner support, and resources sites; lack of time; lack of systemic approach to developing an online module; non-consistency of instructions; and amotivation and lack of enthusiasm emerged as factors that influence the teachers' level of accomplishment of the parts of an E-learning module. The results show that the E-learning modules have fallen short of strict quality standards attributable to certain dire circumstances. This study thus recommends that the institution may adopt or develop its online module criteria to guide the teachers as well as the institution in writing or designing their online modules, and may conduct training in E-module design for teachers.**

Keywords: **E-learning module, module design, higher education teachers, accomplishment level.**

I. INTRODUCTION

The novel coronavirus (COVID-19) pandemic has upended day-to-day lives across the globe. It changed how people work, learn and interact as quarantine and social distancing guidelines have led to a more cybernetic existence. In the education world, online classes done either synchronous or asynchronous approaches using various learning management systems or course software have become the trend. Although this mode of learning has been used to complement traditional face-to-face teaching in higher education, it remains a challenge to both teachers and students, especially since all lessons, teaching-learning activities, and interactions are made virtual. Gillett-Swan (2017) postulated that the practices in a face-to-face classroom can be adopted and employed in the online learning context, but, the "one size fits all approach" is impossible. Orlando and Attard (2015) similarly opined that using technology in teaching does conform to one size fits all approach as this rests on the type of technology in use and the curriculum content being taught. Also, Bates and Galloway (as cited in Hew et al., 2020) said that online methods perhaps are effective in delivering content but not as efficient in promoting active learning and interest among students. These statements imply that even though online class is pervasive in higher education, it still fetches serious concerns among teachers and students.

Specifically, the writing of an E-learning module has become mainstream in today's online teaching and leaves the teachers with their own unique online course design challenge. Even supposing writing learning modules for face-to-face classes is nothing new to teachers, reproducing these in a digital form incites challenges as they need to be thought-provoking, capable of sustaining students' interest, and comprehensible since students have become more self-directed or independent learners. This E-learning module is the teaching-learning media that the teachers prepare to teach the students. It refers to the important organizational medium for delivering content that incorporates readings, activities, directions, and other resources within an online course (Hanna, Glowacki-Dudck & Conceicao-Runlee, as cited in Trilestari & Almunawaroh, 2020). In this study's context, an E-learning module refers to the created material that contains the whole course contents and activities, and all other elements like instructors' information, course information, course outline, grading system, calendar of activities,

academic and mental health support sites, etc. This E-learning module is not the same as the materials used in a face-to-face class with respect to some important dimensions like the time and place, independency and immediacy, instructional design, interaction and collaboration, student evaluation and assessment, learner support and resources, instructional materials and technologies, accessibility, and course evaluation. Given the dimensions of an E-learning module, making it in a logical, sequential, meaningful, exciting, and appropriate manner is undeniably challenging.

Burge (2019) of the University Association for Contemporary European Studies (UACES) mentioned that designing modules, like the E-learning modules, is a responsibility and can be difficult. This alone suggests that preparing and designing E-learning materials remains a challenge to teachers considering that the unforeseen changes in the educational system caused by the pandemic have brought them to a major paradigm shift in their educational practices of teaching from face-to-face class to pure ICT-enabled learning environment. In addition, Cujba (2021) explicated that one of the challenges in making a series of lessons on a web browser that the teachers and trainers experience is online designing and developing relevant E-learning solutions and arranging the lessons in a practical way. Some teachers simply upload their PowerPoint slides or notes onto their course software and asked students to read and understand them on their own while other teachers record their lectures and ask their students to watch them. Teachers likewise merely send links to their students and ask them to download and read or watch on their own while others meet their students synchronously and some face weak internet connectivity. Questions and feedback are simply given through the LMS' or course software's forum or chat box asynchronously which could be either read and understood by the students or simply ignore. Quizzes and other assessments are likewise solely uploaded, other times these assessment activities are directly answered by the students without reading the notes or watching the recorded lectures uploaded. With all these styles, students may experience significant cognitive and skill losses, disengagement from the subjects, amotivation, and being behind time with deadlines.

Several studies and relevant reports pointed out some key issues evocative of teachers' issues and challenges in creating or designing student-friendly yet comprehensible and quality e-learning modules. To name some, Rotas and Cahapay (2020) disclosed that vague learning contents, inadequate learning resources, overloaded lesson activities, limited teacher scaffolds, and poor peer communication are some of the many problems students suffer from their online learning. In the same vein, Mese and Sevilen (2021) revealed that students believe that online education negatively impacts their motivation because they do not have much social interaction, their expectations do not match content or vice versa, and they experience problems in the organization of the learning environment. Also, Rajabalee and Santally (2021) disclosed that students have problems related to a lack of tutor support

and technical difficulties. Orhan and Beyhan (2020) found out that the teachers characterized distance education online as less successful because of a lack of communication and interaction quality. Malipot (2020) commented that the implementation of modular instruction has fostered various challenges for teachers, which may include designing the E-learning modules to make them interesting to students. Castroverde and Acala (2021) exposed that the teachers encounter challenges in planning and preparing the modules, checking and evaluating students' outputs, and providing feedback to students, and teachers failed to recognize students' heavy workload and motivation problems (Niemi & Kousa, 2020). Coman et al. (2020) disclosed that teachers lack technical skills and their teaching style is improperly adapted to the online environment. Niemi and Kousa (2020) disclosed that teachers faced non-authentic interaction and a lack of spontaneity. Meanwhile, Dangle and Sumaoang (2020) revealed that 70% of students cannot easily follow instructions in the modules, while Özüdoğru (2021) unveiled that the pre-service teachers taking online classes face some problems such as the lack of time for live (on air) courses and lack of communication; students and teachers experience technical problems (Bączek et al., 2021), students have issues with regard to limited collaborative learning opportunities (Bączek et al., 2021; Yates et al., 2020); students are becoming less motivated (Niemi & Kousa, 2020; Basuony et al., 2020; Yates et al., 2020).

These citations and findings provide insights that teachers necessarily present and vet the quality of their E-learning modules and offer a certain assurance that their students understand, follow, and remain engaged and excited with the material sent to them. The findings call for effective module design or structure that empowers quality learning and teaching, and maximizes the chance that students will experience consistency, interesting, engaged, and sustained interaction towards progression and meaningful learning. As Toohey cited in Burg (2019) said, much of the creativity, power, and life in teaching, as well as teacher-student interactions, lies in the design of the course, and this includes the E-learning modules which are the converted face-to-face teaching-learning materials to digital format and are based on the curriculum. Basuony et al. (2020), in the same vein, highlighted that delivering a valuable output for the students is one of the main aims of higher institutions, and the course structure [design] is a crucial variable that influences the success of online learning. Also, Eom and Ashill (2016) revealed that course design that is concerned with the planning and design of the course structure and with the process, engagement, interaction, and evaluation aspects of the course is one of the most compelling predictors of user satisfaction and learning outcomes. Hence, learning module design as the process of creating a well-planned and well-created learning environment for students to access information, experience and obtain skills, and practice higher-order thinking skills, is an important element in the landscape of instruction, especially in today's mode of learning. The

module design is about selecting and ordering the types of learning activities that students will undertake to achieve the module outcomes (University College London/UCL).

Given the definitions and accounts on module design, converting the face-to-face materials into a digital format must be following a design, incorporating elements or components, that correspond to the opportunities and constraints of the current situation to meet the courses' learning outcomes and achieve maximum learning for the students as they are now independent learners. It is worthy to note that just as textbooks have their own styles, organization of their contents, and depth of coverage (Cheng & Bakar in Guiamalon et al., 2021), the E-learning modules have their own exclusivity in styles and organization befitting the context.

In addition, the studies offer salient understanding about the issues on online teaching and learning experienced by teachers and students; however, empirical research targeting the teachers in the higher education accomplishment on the important elements of E-learning module based on online course criteria, and on the factors that influence their accomplishment level or the none or partial inclusion of these elements remain scarce. Hence, this paper aimed to report initial findings from a sample population of teachers in a private higher education institution to serve as bases for teacher training on E-learning module design to better enhance students' online and self-directed learning. Also, information from this study is hoped to guide the teachers and the institutions in understanding comprehensively the role of quality measures for a quality E-learning module and adopt or build their own E-learning module standards to help the teachers in making their E-learning modules and be able to render a better online self-learning experience that is more engaging, interesting, comprehensible, and employs a range of strategies and builds on each student's strengths, needs, and prior experiences.

II. LITERATURE REVIEW

Online learning and online teaching have become mainstream in the education landscape during the pandemic. Along with these, making E-learning modules has grown in significance. This E-learning module is saved on an e-learning platform and is dedicated to a particular subject area (O'Donnell & O'Donnell, 2019). The students enrolled in the subject are given user names and passwords to access and answer the activities and examinations in the module. The students access and interact with the-module content at their own pace and in their own time on the condition that they have the appropriate computer device and internet connection. The E-learning module contains the same content as the printed module; however, it has to be delivered in a richer and more comprehensive format that supports independent learning, improves efficiency in education, and even provides the potential to increase educational opportunities. As Mwaniki et al. (2016) said, an online module should actively engage students to search for and share knowledge and open

educational resources with other students and for Logan, Johnson, and Worsham (2021), it should provide a self-regulated learning opportunity for students. To this connection, the E-learning module design or structure is indubitably essential to guide the teachers in crafting more interesting and comprehensive quality modules. Hence, various authors have suggested and explicated the elements and characteristics of a quality online module.

To name, Veletsianos (2020) presented seven essential characteristics of an online module or online course. He elucidated that a good online course should be informed by issues of equity and justice, interactive, engaging and challenging, effective, and promote student agency. On the other hand, Wa-Mbaleka (2012) provided practical guidelines known as the 5-WH approach to designing E-module. This 5-WH is the who, what, why, where, when, and how questions. For the who question, this centered on who is involved in the instructional and learning process and in designing an online course or online module. In this question, there are three major categories of people, they are the learner, the course facilitator, and the employer. For the what question, this focuses on the course goals associated with that module, the major topics of that module, the assessment activities, and the learning objectives. The why question involves the reasons to learn some course contents while the where question emphasizes the importance of finding information easily, thus structure, consistency, and clarity are highlighted. The when question involves when all assignments, quizzes, tests, and projects are due, and the how question calls for practical application of everything about the module. In the same vein, Lister (2014) revealed four main considerations when designing e-learning and online course, these are structure and security, content presentation, collaboration and interaction, and feedback. In addition, Rottmann and Rabidoux (2017) offered four guidelines for designing an online course or online learning module, these are involving the learner, making collaboration work, developing a clear, consistent structure, and reflecting and revising.

Meanwhile, Mata (n.d.) presented four effective elements for optimum online learning modules which are (1) presenting micro-learning or bite-sized modules, (2) giving knowledge checks, making the module interactive and engaging, (3) using gamification, and (4) socializing the learning process while Cummings (2020) gave six key design elements of successful online learning which included (1) transparent goal-setting, (2) proactive, planned communication, (3) a balance between structure and choice, (4) the elevation of faces and voices, (5) a feedback plan, and (6) student-friendly wayfinding. In the same way, TalentLMS (2014) offered four elements of an online course and these include a consistent instructor presence that takes into consideration the value of feedback, an efficient and well-designed learning management system, quality of the content that is up to par, delivery methods, and online tests and quizzes. Johnson (2020) also provided an online course module structure or elements which include the length of the lectures, sequence of content and

activities, means of checking in with students to ensure understanding, methods of making passive experiences more active, and moving students from one experience to another. Neelakandan (2021) likewise mentioned five elements. First is the navigation like menus, links, arrows, icons, and previous, next, and move to buttons that need to aid the students to navigate conveniently. Second is relevant content which means it has to be made short, clear, and engaging and not long and boring. Third is the design and visuals which entails using correct visuals like images, colors, shapes, forms, and tables in the right and unified way. Fourth is interactivity which refers to the interaction between students and the e-learning material, and lastly tracking learners' progress.

The various elements and characteristics of an E-learning module offered by various experts and authors illustrate that any E-learning module is designed in a way to address and accommodate the needs of its learner. Subsequently, teachers must find a way to develop and ensure that their E-learning modules are informative, engaging, and enhance the learning experience by meeting a number of criteria. Subsequently, this study mainly emphasized the essential components or elements of the E-learning module. It specifically sought to find out answers to the following questions.

1. What is the extent of accomplishment of the higher education teachers on the essential components of an E-learning module?
2. What are the factors that influenced the teachers' level of accomplishment of the essential components of an E-learning module?

III. METHODOLOGY

A. Research Design

This study utilized mixed method with explanatory sequential design to put findings in context and strengthen conclusions. Verhoef and Casebeer (1997) explained that a degree of comprehensiveness may be achieved by combining quantitative and qualitative methods than a standalone quantitative or qualitative study. Specifically, to determine the accomplishment level of the teachers on the elements of an E-learning module based on online module criteria, a quantitative research method using descriptive design was utilized. Results from this first problem were used as bases in the conduct of the qualitative part to determine the factors or reasons that influenced the accomplishment level of the essential parts of an E-learning module.

This study was conducted in one of the three private higher institutions in La Trinidad, Benguet, Philippines. This institution was selected purposely as a workable place for such kind of study since this institution used a purely online class amidst the pandemic. The respondents were the full-time teachers of the said higher institution.

For the quantitative phase on the level of accomplishment of the essential parts of an E-learning module, this study used total population sampling since the population size was relatively small. Out of the total population of thirty-six (36), twenty-eight (28) teachers answered and returned the self-assessment survey questionnaire. Meanwhile, purposive sampling was used in recruiting participants for the qualitative phase. Due to the sequential design of this mixed method study, the participants, who were the teachers who answered the self-assessment survey questionnaire, were determined based on the following criteria, a) used the learning management of the institution for two consecutive semesters of the academic year 2021-2022, b) a regular and full-time teacher in the institution, and c) willing to participate in the conduct of the study and devote time and effort to provide information. Bernard (2002) highlighted the importance of availability, willingness to participate, and the ability to communicate experiences and opinions in an articulate, expressive, and reflective manner. To this connection, there were seven teachers who participated and were interviewed to gain deeper insights into the factors that influence teacher's accomplishment level of the essential parts of an E-learning module.

B. Data Collection Instrument

To answer the problems on the extent of accomplishment of the essential areas for an online learning module, a self-assessment survey tool was used. Some items from the Quality Online Course Initiative Rubric developed by the Illinois Online Network (ION), University of Illinois Springfield were adopted. These items are universal fundamental elements of an online module. Meanwhile, an interview guide questionnaire was used to gather qualitative data on the factors that influence their accomplishment level.

C. Treatment of Data

In the quantitative phase, the data gathered from the survey tool were classified, tallied, and tabulated. Data were summarized using descriptive statistics. Specifically, weighted mean was used as a statistical method. The 5-point Likert scale shown in Table 1 was used to measure the teacher's level of accomplishment of the components of their E-learning module.

Table 1. Accomplishment Level Scale

Numeri-cal Rating	Statistical Range	Descriptive Equivalent	
1	1.00-1.50	Not accomplished at all (NA)	Not applicable based on course design and content.
2	1.51-2.50	Slightly accomplished (SA)	Not Present, but should be, based on course design and content, or present but not appropriate for this course.
3	2.51-3.50	Partially accomplished (PA)	Some evidence of this criterion, but it needs to be presented more clearly or better developed.
4	3.51-4.50	Mostly accomplished (MA)	Evidence of this criterion is clear and is appropriate for this course. More could possibly be added.
5	4.51-5.00	Totally accomplished (TA)	Evidence of this criterion is clear, appropriate for this course, and demonstrates best practices in a manner that models its use.

In the second phase, a qualitative descriptive design was used to provide straightforward and basic descriptions of experiences and perceptions. As Bradshaw et al. (2017) explained, this design recognizes the subjective nature of the problem, and the different experiences the participants have and will present the findings in a way that directly reflects or closely resembles the terminology used in the initial research question. In addition, this design is also frequently used within mixed-methods studies where qualitative data can explain quantitative findings in explanatory studies (Doyle et al., 2016).

For the analysis of the qualitative data, thematic analysis was used. Braun and Clarke (2006) described thematic analysis as a systematic way of seeing and processing qualitative information using coding. This study underwent several phases of the thematic analysis as suggested by Braun and Clarke (2006). These are data familiarization, creating the initial code, searching for themes across the data, reviewing the themes, and then making the report. The themes served as the basis for the findings of the study and substantiation to the teacher's level of accomplishment of the components of an E-learning module.

IV. RESULTS

A. Teacher's Accomplishment Level of the Components of Quality E-Module

Table 1 shows the overall weighted mean of 2.63 implying that the teachers partially accomplished or met the criteria for an E-learning module. In detail, the component Instructional Design was partially accomplished by the teachers as shown by a total weighted mean of 2.84 denoting that the areas of this component were presented but lacked comprehensibility. The areas of this component which are Structure with a 3.23 weighted mean; Learning Goals, Objectives, and Outcomes with 3.17; Course Information with 2.81; Instructional Strategies with 2.52; and Use of Multimedia with a 2.84 weighted mean are all partially accomplished by the teachers. This result indicates that some of the conditions required for these areas need to be presented more clearly or better be included. Meanwhile, Academic Integrity was slightly accomplished as shown by a weighted mean of 2.47.

As regards the component Communication, Interaction, and Collaboration, it obtained a total weighted mean of 2.85 which means that the areas required for this component are partially accomplished. Specifically, the areas such as Activities and Opportunities with a weighted mean of 2.71, Organization and Management with 2.90, Group Work with 2.66, and Individual Work with a 3.13 weighted mean were all partially accomplished. This result suggests that the requirements for these areas were presented but need to be made more comprehensive.

The component Student Evaluation and Assessment of the E-learning module got a total weighted mean of 2.89

revealing that the areas of this component were partially accomplished. Specifically, the areas Goals and Objectives with a 2.97 weighted mean, Strategies with 3.32, Grade with 2.95, Feedback with a 2.64 weighted mean, and Management with a 2.57 weighted mean were all moderately realized. This finding infers that the criteria for these areas were presented but lacked clarity, and some of the requisites of these areas need to be included. Moreover, the component Learner Support and Resources was slightly accomplished as shown by a total weighted mean of 2.21. It can be gleaned that the two areas of this component, Institutional or Program Support and Resources, and Academic Support and Resources, are slightly accomplished as shown by their weighted means of 2.10 and 2.31, respectively. This result denotes that the important features in both areas were not included or some features were included but inappropriate.

Table 2. Teachers' Accomplishment of the Components of Quality E-Module

Components of an E-learning module	WM	DE
I. INSTRUCTIONAL DESIGN		
A. Structure	3.23	PA
B. Learning Goals, Objectives, and Outcomes	3.17	PA
C. Course Information	2.81	PA
D. Instructional Strategies	2.52	PA
E. Academic Integrity	2.47	SA
F. Use of Multimedia	2.84	PA
TWM	2.84	PA
II. COMMUNICATION, INTERACTION, AND COLLABORATION		
A. Activities and Opportunities	2.71	PA
B. Organization and Management	2.90	PA
C. Group Work	2.66	PA
D. Individual work	3.13	PA
TWM	2.85	PA
III. STUDENT EVALUATION AND ASSESSMENT		
A. Goals and Objectives	2.97	PA
B. Strategies	3.32	PA
C. Grade	2.95	PA
D. Feedback	2.64	PA
E. Management	2.57	PA
TWM	2.89	PA
IV. LEARNER SUPPORT AND RESOURCES		
A. Institutional or Program Support and Resources	2.10	SA
B. Academic Support and Resources	2.31	SA
TWM	2.21	SA
V. INSTRUCTIONAL MATERIALS & TECHNOLOGIES		
A. Structure and Design	3.17	PA
B. Use of Multimedia	2.53	PA
C. Use of Images	3.35	PA

D. Links and Navigation	2.45	SA
E. Technologies Outside the LMS	2.23	SA
TWM	2.75	PA
VI. ACCESSIBILITY		
A. Images and Graphics	2.07	SA
B. Audio, Video, and Multimedia	2.52	PA
C. Documents (HTML, Word, PowerPoint, Excel, etc)	2.80	PA
D. Colors	3.26	PA
TWM	2.66	PA
VII. COURSE EVALUATION		
A. Layout and Design	2.24	SA
TWM	2.24	SA
OVERALL MEAN	2.63	PA

Another component of the E-learning module is the Instructional Materials and Technologies which obtained a total weighted mean of 2.75 indicating that the requirements for this component were partially met. Specifically, the areas Structure and Design, Use of Images, and Use of Multimedia were all partially accomplished as signified by their weighted means of 3.17, 3.35, and 2.53, respectively. This result presents that the criteria or elements for these areas were incorporated but lacked accuracy. Meanwhile, the areas Links and Navigation with 2.45, and Technologies Outside the LMS with a 2.23 weighted mean were both slightly accomplished. For the component Accessibility, it gained a total weighted mean of 2.66 denoting that the requirements or areas of this component were partially realized which means that the requirements were presented but lacked comprehensibility or have to be included. In detail, the areas Audio, Video, and Multimedia with a 2.52 weighted mean, Documents with a weighted mean of 2.80, and Colors with 3.26 were partially accomplished. On the other hand, Images and Graphics was slightly accomplished as signified by its weighted mean of 2.07 implying that the features of this area were not comprehensively included. It may also mean that there were aspects of using images and graphics that were included but inapplicable.

Finally, the Course Evaluation had a weighted mean of 2.24 interpreted as slightly accomplished. It shows that Layout and Design, the only area of this component, was slightly accomplished as signified by a weighted mean of 2.24. This implies that the elements of Layout and Design were not included even though they should be based on the content and course design. However, it could also mean that the elements were included but not applicable.

B. *Factors that Influenced the Teachers' Accomplishment Level of the Essential Elements of the E-Learning Modules*

From the quantitative results, a qualitative inquiry was conducted to identify and explain the factors or reasons that influenced the teachers' accomplishment level of the essential elements of the E-learning modules. Based on the semi-structured interviews, six (6) themes emerged. These include (1) the absence of capacity-building training in writing/making E-learning modules, (2) lack of awareness of the school services, (3) learner support and resource sites, (4) lack of time, (5) lack of systemic approach to developing an online learning module, (5) non-consistency of instructions, and (6) amotivation and lack of enthusiasm.

Theme 1. Absence of Capacity-Building Training in Writing/Making E-learning module

The participants find it arduous to prepare their E-learning modules for their subjects while others felt dubitable or indecisive about the contents and activities and how these should be presented as they have not received any training workshops in writing or designing E-learning modules. The teachers have generally banked on their knowledge of how they prepare their handouts and modules for a face-to-face class. This can be seen in the following data extracts.

Excerpt 1: How will I know the complete parts of an e-learning module when we did not have training.

Excerpt 2: I am not knowledgeable of the indicators or parts for a quality E-learning module. Again, we did not have any capacity training in writing or preparing E-modules so definitely we would just come up with our own designs, incorporate whatever we think are necessary.

Excerpt 3: I really don't know I just relied on like the printed modules we sent last semester because we did not have training before we prepared e-modules.

In addition, teachers supposed that following the contents particularly the lessons of their subjects' syllabi suffice and their e-learning modules do not miss any other important contents. This similarly shows that the teachers did not receive training in making e-module and consequently relied on the contents of their syllabus and did not consider placing other important information such as support systems like the institution's library e-books, technical resources, icebreakers, calendar of activities, grading system and other criteria. This is observed in the following excerpts.

Excerpt 4: My only basis is the outline given to me. I did not know that even those [grading system, calendar of activities…] should be placed.

Excerpt 5: I thought lessons and the assessment activities are enough. It goes back to the non-provision of capacity-building training in e-module writing.

Excerpt 6: I did not feel much difficulty, I just followed what is in the syllabus which they gave.

Excerpt 7: I thought it is enough just to follow the contents of the syllabus

Excerpt 8: I just relied on my syllabus, so long as the lessons are included, and so I thought, that is enough. I did not know because they did not inform us to put like the syllabus and ice

breakers or motivation activities or the links which they (students) can access if ever they have a problem about the moodle.

Theme 2. Lack of Awareness of the School Services, Learner Support, and Resources Sites

The participants averred that they lack awareness of the institution's academic support and resources like the links and or e-mails that students can access for program information and policies, and other technical and academic supports. This is deduced in the following verbatim responses.

Excerpt 9: How? I did not know that there are like those e-books which should be included, I'm new so that's why I just followed what I took over.

Excerpt 10: I did not know that we have e-books and that the contact address of the guidance that should be included.

Excerpt 11: I did know about the e-books, and there I do not even how the guidance could be contacted.

Excerpt 12: If it is about the area problem about technical, I do not know if technical department know that they can be contacted by the students. How they can be contacted.

Theme 3. Lack of Time

The participants acquiesce with each other in averring that they do not have much time to prepare their E-learning modules. Their lack of time making the E-learning modules is attributed to being a freshman in the field, new curriculum and new subjects, and non-familiarity with the learning management system. This account is revealed in the following responses.

Excerpt 13: That's it. I'm new I do not know how that is why, you saw it, there is lack of time so I need to work overtime.

Excerpt 14: There are many subjects especially those that handle the major subjects and the contents of these are not yet mastered because we are in a new curriculum, and how to use our LMS is not yet mastered and all these go together. So, what is in the syllabus is what is only placed in the E-learning module, other parts are not included like giving icebreakers or motivational activities because there is a lack of time. Besides, the LMS seems difficult, I do not know how to use it.

Excerpt 15: There is a lack of time since even how to use the LMS and learning the style of the LMS, this aggravated, in the preparation of the lessons.

Theme 4. Lack of systemic approach to developing an online learning module

Some of the participants supposed that the students can understand the contents while others remarked that the students are indolent and have poor comprehension. Their remarks or responses are synopsized into having a limited systemic approach in developing E-learning modules. This can be observed in the following extracts.

Excerpt 16. What I know is that the students can understand because for me it is clear. I did not put the others (support sites like related pdfs and videos which students can access) because they will not even access.

Excerpt 17. I believe that the students will understand the lessons. If there are no clarifications or questions from students, it means they understood. I did not give feedback if there are no questions from students.

Excerpt 18: Only when students ask (before giving feedback).

Excerpt 19. They are lazy even to make the activities and to read the lessons so they go directly answering the activities (few activities were included).

Excerpt 20: I cannot point out their learning needs because I did not conduct a pre-test to measure their knowledge about the subjects… They can get along, they just lack discipline so they are getting lazy, and in the ending, they are now taking it for granted.

Excerpt 21. The students' level of comprehension is poor. The students are lazy. What a waste the efforts are, they will not do it anyway. See, what they submit is a copy and paste one even if there is an instruction given.

Theme 5. Non-consistency of instructions

From the participants' responses, it can be inferred that there is unconformable information or instruction relayed to the teachers. One participant alluded that there was no instruction given on how to make the online learning module while two participants mentioned that there is a contradiction in instructions and a lack of clarity. This reason instigated them to follow or copy another's work. In addition, escaping from comparison with another teacher's work and avoiding commentaries enthused the copying of how others have made and designed their E-learning modules. These statements can be observed in the following participants responses.

Excerpt 22: I'm new and they did not inform me how and what to put in the module, so I just followed what is being prepared by the one I took over but when I saw what Ma'am xxxxx made, it seems it is better so I was asking how.

Excerpt 23: Instructions in regard to the instructional design of our E-learning module are vague. There is no uniformity that's why it is just like that.

Excerpt 24: There is no consistent instruction that is why just follow what others have done because anyway students will compare what other teachers have done to what another teacher. That is why what others have done, I just followed it. And if I include something, there might be comments because students will compare it to others' modules.

Theme 6. Amotivation and lack of enthusiasm

It is apparent from the participants' responses that one which leads to the partial accomplishment of the parts of the E-learning module is attributed to a lack of enthusiasm or

motivation. Some participants deliberately accepted that they are lethargic in preparing and providing varied activities and assessments as they consider the difficulty of checking a lot of papers especially since each section has a big class size. Another participant held that the idleness of preparing various learning tasks is attributed to the poor quality of the tasks the students submit as these are simply duplications. These statements can be observed in the following data extracts.

Excerpt 25: About teacher feedback, I just wait if there are reactions or questions from the students.

Excerpt 26: I'm getting lazy actually. It is difficult to check that's why I have limited type of assessment activities. If the number of students in a class is big, ahh that is too much... besides there is no formal evaluation and monitoring of our E-learning modules.

Excerpt 27: It seems I have limited types of activities. I'm getting lazy besides it is difficult to check.

Excerpt 28: I'm lazy because what they submit is a copy and paste one. The other types of activities are redundant because these are given by other teachers so I do not give them because if the activities are the same, they will get lazy.

In addition, one participant mentioned that her lack of enthusiasm and motivation is attributed to the non-monitoring and evaluation of their E-learning modules.

Excerpt 29: ... besides there is no formal evaluation and monitoring of our E-learning modules.

V. DISCUSSION

A. *Teacher's Accomplishment Level of the Components of Quality E-Module*

The general result of partial accomplishment (2.63) of the essential components of an E-learning module is a manifestation that the E-learning module is deemed to be failing to meet certain standards or requirements, which in turn could be attributed to either the absence or the none continuity of quality measure processes for online instruction and to teachers' lack of preparation and knowledge of designing E-learning modules. Although this seems to be an over-generalization, Bates (n.d.) in his Teaching in a Digital Age, explained that the challenge for institutions to be able to produce and guarantee quality online teaching and learning are how to ensure that the teachers or instructors are aware of the best practices and how the institutions ensure that guidelines for quality online instruction are implemented and followed. This explanation correspondingly denotes that the teacher's lack of knowledge of designing E-learning modules and the institution's taking no notice of the quality measures contribute to a hardly well-developed E-learning module that can effectively facilitate or transfer learning.

To discuss each component, the component Instructional Design was partially accomplished by the teachers indicating that the teachers identified incompletely the learning needs of their students; hence, they developed their E-learning modules that facilitate the transfer of knowledge and skills to the students but with the use of instructional methods that fairly go with multiple learning styles, strategies, and preferences. In detail, the criteria for Structure of the E-learning module were partially accomplished demonstrating that the sequence of the contents and the purpose of the learning activities of the E-learning modules to allow the students to achieve the learning objectives were partially incorporated. The course organization like the syllabus, and where the students go and begin the course or find the information that they need were partially met thus need to be included and made more comprehensible. This result also means that the chunking of the information to help the students to learn the content and achieve the stated objectives was partially accomplished. Moreover, the criteria for the Learning Goals, Objectives, and Outcomes were partially met showing that the course outcomes, as well as the learning objectives for each lesson, were presented; however, these need more clarity and accuracy. Similarly, the criteria in regards to the Use of Multimedia like videos and audio material were partially met or accomplished which suggests that the audio and the video files in the E-learning modules can partially contribute to achieving the course or module objectives. They are relevant to the topic, but their specific purposes are to a certain degree detracted from the course goals and objectives. It also means that not all the video and audio files start with an overview of the topic and a list of objectives, and the use of apps or video makers was partially used in making videos.

Another element that should be included in the Instructional Design is the Course Information. The results show that there was a lack of information about the course. This specifically indicates that the course description was presented; however, other requirements such as instructor information which includes contact number, biographical, and availability information, and a picture were not included; a list of instructional materials/supplies such as textbooks and other instructional materials needed for the course, the credit hours for successful completion, a clear and concise list of chapters and lessons as well as activities were likewise partially accomplished. Also, the grading policy which includes the late submission policy, grading scale and weights; the calendar of due dates and other events; and the list of technical requirements such as connection speed, hardware, and software need to be presented more clearly or better be developed.

Also, the criteria for Instructional Strategies were partially accomplished inferring that multimodal instruction or a variety of instructional delivery methods to accommodate multiple learning styles were insufficient. Also, there was not much variety of ways for students to demonstrate their knowledge like debate, writing argumentative/concept/position papers, subjective and objective essays, short quizzes, concept maps, drawing, slogans, etc., and a list of appropriate tools for each activity. In addition, opportunities for students to introduce themselves

to each other as a way of encouraging synergy within the course were partially accomplished. On the other hand, the criteria for Academic Integrity were slightly accomplished suggesting that abiding copyright and fair use laws, proper citations, netiquette standards, and academic integrity expectations were barely met.

Moreover, the component Communication, Interaction, and Collaboration were partially accomplished. This is an indication that how the course design, assignments, and technology effectively encourage exchanges among the instructor, students, and content lacked clear presentation. To detail the elements of this component, the criteria for Individual Work were partially accomplished suggesting that individual activities and clear instructions on how to do these were partially accomplished, and consequently need to be presented more clearly. Also, the criteria for Organization and Management were moderately accomplished indicating that separate forums or discussions for course questions and others outside the course topics were not comprehensively realized. It further implies that the organization of the discussions in the forums and or threads and the role of the teacher in the discussion activities were partially clear. Access was not also fully available to each student and group based on the discussion's purpose like private conversations between student and instructor, group work, and class interactions.

Moreover, the criteria for Activities and Opportunities were partially accomplished entailing that the learning activities and other opportunities that foster student-student, student-instructor, and student-content interaction and collaboration were partially accomplished. In terms of Group Work, the result indicates that a statement of how, when, and where the final product will be delivered or submitted was partially accomplished. In addition, a statement of the group's overall task, the rules for forming groups and assigning roles for group members, and the standards and expectations of group participation were fairly accomplished, thus need to be presented more clearly or better developed and improved.

As regards the component Student Evaluation and Assessment, the result shows that the conditions for this component were partially accomplished indicating that the process to determine student achievement and quality of work, including the assigning of grades were partially carried out. In-depth, the criteria for the Strategies for assessment and evaluation were partially accomplished which means that using multiple or various methods for assessment and evaluation, conducting assessments and evaluations on an ongoing basis throughout the course, and using tools appropriate for measuring the learning outcomes were not comprehensively accomplished. Also, academic integrity in terms of assessments and evaluations was moderately achieved. Moreover, the criteria for Goals and Objectives were not comprehensively achieved. This indicates that the alignment of the assessment and evaluation with learning objectives, and clarity of communicating the purpose of the

assessment and evaluation to students were not presented more clearly.

As regards the Grade, the result indicates that giving an explicit rubric, rationale, and characteristics for each graded assignment, defining course procedures for reporting grade information, providing a grading scale that defines grades and/or weights, explaining penalties to assessed grades like if failed or No Final Exam or Incomplete, and providing a mechanism for measuring quality and quantity need to be presented more clearly or better developed as they were partially accomplished. With reference to Management, the result shows that providing a statement for time allocation for each assessment like a deadline for submission, instructions for completion and submission, and providing a statement indicating whether or not the assessment can be retaken, and a description of the assessment delivery method were presented but need clarity. Meanwhile, for Feedback, the finding presents that providing a statement explaining when the students should receive feedback, what type of feedback they will receive, and how this feedback will be given to them was not comprehensively presented.

For the component Learner Support and Resources, the result demonstrates that the academic and technical resources for students were very limited or not presented even when they should be based on the course content. In detail, the requirements for Academic Support and Resources were slightly accomplished. This insinuates that providing a glossary of terms and a list of academic resources with links to the institution's library, tutoring center, counseling services, and other resources, and orienting the students in regard to opportunities for program and course orientation beyond the syllabus were faintly considered to include in the E-learning module. Furthermore, for Institutional or Program Support and Resources, the result shows that providing links to institutional or program information, policies and procedures, giving links to tutorials, and other support sites like E-books related to the course which the students can access, and giving of links, e-mail addresses, and/or phone numbers for technical support were hardly presented.

Furthermore, for the component Instructional Materials and Technologies, the result indicates that the design and use of documents, graphics, multimedia, and other technologies have to be presented more clearly or be developed or included. Specifically, the result reveals that the criteria for the Use of Images like the clarity of images and optimization of the file image for efficient loading, the use of animated GIFs to contribute to the learning experience, or support the course content were presented but need improvements. For the Structure and Design, the result means that a simplified scrolling to improve usability for desktop and mobile devices, consistent layout design and color scheme throughout the site, and readable and consistent font type and size were partially achieved or need to be considered. In terms of Use of Multimedia, the finding demonstrates that the technical requirements such as the audio and video standards which

include clarity, file length, compatibility of the audio and video player with multiple operating systems, and free plug-in were partially accomplished. On the other hand, other criteria for Instructional Materials and Technologies as a component were slightly accomplished. Specifically, for the Links and Navigation, the result suggests that keeping consistency in the location of the navigation aids, making hyperlinks noticeable and clear, not breaking the hyperlink, and making the hyperlink open in consistent windows were somewhat accomplished. Similarly, for Technologies outside the LMS used by the institution, result shows that providing instructions on how to access the technology outside the LMS like instructions on URL, account creation, and instructions for completing the assignment with the tool were barely included.

About the component Accessibility, the result suggests that the accessibility of the E-learning modules for people with physical, cognitive, or learning disabilities was not completely accomplished. Specifically, the result shows that the use of Colors like color contrast was partially realized. It was moderately effective and understandable for students with or without disabilities. Using high contrast settings or making the page responds to high contrast browser settings to add readability were partially accomplished, thus need to be taken into consideration. Moreover, for the presentation of Documents, the result indicates that making the content logically ordered, putting titles of tables and proper formatting using table headers and scope, and making the content readable on mobile devices were partially met. For the element Audio, Video, and Multimedia, the result denotes that making the audio or video player control to be keyboard accessible for keyboard users, providing a text version of the spoken part and making it at least 99% accurate closed captions, providing text transcripts for audio and video content, and allowing the user to control the timing of content changes were partially achieved. This shows that the audio, video, and multimedia in the E-learning module were accessible to some students. Meanwhile, for the Images and Graphics, the result entails that providing Alt Text or text equivalent for every non-text, and putting captions for graphics such as photographs, charts, or graphs were partially accomplished. It denotes that the use of images and graphics was not accessible to all the students.

Finally, for the Course Evaluation, the result suggests that the use of the processes and mechanisms to elicit feedback from learners for the purpose of course improvement was partially met. In detail, providing opportunities for learner feedback throughout the course on issues surrounding the course's physical structure (e.g., spelling mistakes, navigation, dead links, etc.), opportunities for learners to offer feedback to the instructor on instructional strategies, and opportunities for learners to offer feedback on course content need were slightly accomplished. This denotes that there was a lack of evaluation of the course to determine its weaknesses and be improved.

On the whole, most of the essential parts of the E-learning module which include student evaluation and assessment; communication, interaction, and collaboration; instructional design; instructional materials and technologies; and accessibility were partially accomplished indicating that the criteria or the necessary components for these parts of the E-learning module are relatively realized or need to be presented more clearly or be included in the E-learning module while the course evaluation and learner support and resources were slightly accomplished inferring that the criteria or elements composing these components are either not present even when they should be based on course and content or are present but not suitable. These results initiate an initial conclusion that the E-learning modules lacked in quality or failed to approximate the essential and basic elements of an E-learning module. These results hardly conform to Wood's et al. (2004) explanation that the key factor for distance learning is to ensure that the courses meet the needs of the consumers or end-users by increasing the quality of instructional materials and to Librero's idea cited in Hamweete (2012) that the teachers and the institution must have high instructional materials to maintain high-quality instruction and academic standards.

B. Factors that Influenced the Teachers' Accomplishment Level of the Essential Elements of the E-Learning Modules

One of the reasons or factors that contributed to the slight or partial accomplishment of the essential parts of an E-learning module is attributed to the non-provision of capacity building or training for the teachers in writing E-modules. The responses relatively demonstrate that the E-learning modules are designed and presented based on how materials for the face-to-face classroom are made. As the teachers purported, putting all the lesson contents as written on their syllabi and presenting them in sequence are what make an E-learning module. The United Nations Development Programme (UNDP) (1998) in Maica (2021) defined capacity building or capacity as the ability of individuals and institutions to create and implement decisions and perform functions in an effective, efficient and sustainable way. Correspondingly, Gibbon et al. (2002) explained that the key function of capacity building is to improve the abilities of an individual or organization to carry out an action in order to execute and accomplish a task, solve problems and set and achieve the desired objectives. Putting this case at the education level, it could mean that capacity building is conducted by the institution to increase and develop the teachers' skills and competencies to be able to perform their functions efficiently and improve the quality of education.

As an analogy, creating or preparing E-learning modules is a new shift in education brought by the current health issue, subsequently poses the contention that teachers are unaccustomed to a pure or complete online modality of instruction and are unversed in designing or writing an E-learning module as they are not absolutely informed of its

essential parts. This case entails that capacity building with a focus on preparing or making an E-learning module is one of the needs of most teachers to be able to create well-made and presented E-learning modules. The lack of training or experience in writing or designing an E-learning module could absolutely result in the non-presentation or non-inclusion of other important parts as it is revealed in the quantitative data that the teachers have slightly to partially complied or met the criteria for a quality E-learning module. Also, Lloyd, Byrne, and McCoy (2012) mentioned that the lack of training is a common challenge for a novice online faculty member.

Another factor that influenced the teachers' accomplishment level of the components of an E-learning module is related to teachers' lack of awareness of the school services, learner support, and resource sites. The given accounts show that the services for learner support and resources the school provide specifically the E-books and the contact addresses such as e-mails and mobile or phone numbers that the students may contact in cases that they need help other than academic-related matters like technical and psychological supports which technically their subject teachers may not be able to provide or answer were excepted in the E-learning modules. This finding is in accord with the quantitative data result that some essential parts of the E-learning modules were slightly to partially met or accomplished. Usman (2016) explained that all the important and contributory materials and non-materials on the attainment of goals in an institution are considered resources, and the human component of resources who are the teachers in the education world work together with the facilities and equipment to bring about accomplishments. It is supported on this ground that teachers' awareness of these facilities which include learner supports such as cognitive support, affective support, and systemic support, and the inclusion of these in the E-learning modules is very much imperative.

Furthermore, the short space of time for teachers to prepare their E-learning modules is agentive to the production of teaching and learning materials of poor quality. This concurs with the quantitative result that the teachers were able to slightly to partially accomplish or met the essential elements for a quality E-learning module as they do not have much time to prepare and review the contents of their subject considering that they are in a new curriculum which means they have new subjects that require exhaustive reading and familiarization. Also, doing an E-learning module and using the LMS are activities that the teachers are not very much acclimated and used to. Adjei et al. (2015) remarked that the preparation of teaching-learning resources is time-consuming and laborious. This line alludes that working on the E-learning modules requires much more time since developing an online learning material is a multifaced challenge, it requires a considerable deal of time to ensure quality and refinement. This finds support in Kramarski et al. (2010) postulating that the effect of teachers' lesson preparation within a limited duration on learning outcome needs to be observed. Enough

time allows teachers to read and review their E-learning modules and be able to identify or check the lacking areas. Enough time to work on their E-materials requires them to study and select good videos and links relevant to the lessons and which they may include as supporting learning materials to what they have prepared.

In addition, the E-learning module is more than the reservoir where contents or lessons are stored and accessed. It consists of all the activities, assessments, and all other components such as feedback, interactions, instructions, student support and resources, and other material contents that facilitate the transfer of knowledge and skills to the students. It also takes into account the use of a variety of instructional methods that encompass multiple learning styles, strategies, and preferences. Thus, an online module is perceived as a system or a structure that renders the same academic rigor as face-to-face classrooms. As a system, it supports students' independent learning in diverse environments. As Puzziferro and Shelton (2008) explained that designing an online course requires a systemic process that dissects the course learning objectives, presents content, interactivity, and assessment. In this sense, a teacher's lack of a systemic approach to developing an E-learning module is a factor that leads to poor quality. It is evident from the responses that there is a limited systemic approach used as the teachers have not used various approaches in knowing their students' learning needs, learning styles, and level of comprehension or ability for they have made their deductions early on that the students are lazy, enervated and lack comprehension. This shows that they failed to include varied activities and stratagems or approaches that could accommodate various learning needs, styles, and preferences. It likewise manifests that the role of feedbacking and strong teacher-student interaction is pretermitted as they wait for students to be the first to clarify or react.

On the same line, the E-learning module does not only present the activities but also needs to give clear work instructions to help productivity and resolve inconsistencies and conflicts about performance afterward. It helps in moving away from chances of making mistakes and approximations. Taylor (2017) wrote that the clarity of instructions directly affects the quality of the work. In the education field especially with the current mode of teaching where teachers have to shift from face-to-face teaching to online, the tasks of making E-learning modules are not always going to be common and thus requires clear instructions. As Howatt (July 2016) wrote, one of the most important tasks for a leader or administrator, during steady times and amidst changes, is to not only act as a compass that guides employees but also to give them clear directions or instructions to handle and outdo any obstacles that they may face along the way. In this case, the absence of imprecision of instruction and information in making or designing the E-learning modules emerged as one of the factors or reasons the parts of an E-learning module are not comprehensively achieved. As Taylor (2017) commented,

inconstant and vague instructions could result in work that does not fulfill requirements.

Another factor that instigated the slight to partial accomplishment of the components of the E-learning module is teachers' amotivation and lack of enthusiasm. These actions undeniably reduced the quality of their E-learning modules. Orosz et al. (2015) revealed that teachers' enthusiasm makes students not cheat and teachers who are motivated to teach can induce students' motivation to learn. This finding proves that teachers' enthusiasm and motivation are important and desirable qualities of effective teachers. Their enthusiasm and motivation to provide varied and relevant learning activities, and monitor and communicate with students lead them to have a positive attitude towards their academic activities, and induce enjoyment, excitement, and achievement.

The lack of enthusiasm and motivation of teachers could be attributed to different reasons. One of which is the non-monitoring and evaluation of their E-learning modules. Teacher evaluation is purposefully conducted to inspire the teachers to contribute knowledge to their students in the best possible way. As Sawchuk (September 2015) discussed, teacher evaluation is used to review and rate teachers' performance and effectiveness and the findings from these evaluations would be used to provide feedback to teachers and guide their professional development. Teacher evaluation can improve teacher growth and performance (Stronge et al., 2020-2021), gain information from this evaluation, and subsequently improve and develop new skills, increase effort (Taylor & Tyler, 2012), and increase motivation. It can be inferred from this account that one of the factors that played on the slight or partial accomplishment of the elements of the E-learning modules is the lack of motivation to do better as there is no evaluation or constant monitoring of the modules to know the areas which need improvement.

VI. CONCLUSION AND RECOMMENDATION

It was concluded through the findings of this study that the E-learning modules have generally fallen short of quality measures as a result of certain dire circumstances or factors that the teachers experience. The presence of these factors contributes to the arduous development of a well-designed E-learning module. These conclusions offer insights that; the E-learning module design needs to be of the highest quality possible as it relates to distance learning where the students are generally independent learners; and the E-learning modules essentially need to undergo a systematic quality assurance procedure to bring out the strengths and possible weaknesses or feedback necessary for improvement and be able to provide the students with quality education in a self-directed learning mode. To do these, the institutions may adopt or develop their online module criteria to guide the teachers as well as the institution in writing or designing their E-modules. Also, the institution may conduct training in E-module design for teachers to be able to produce well-written and designed E-learning modules.

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