USEFULNESS AND CHALLENGES OF CLUSTERED SELF-DIRECTED LEARNING MODULES IN ENTREPRENEURSHIP FOR SENIOR HIGH SCHOOL DISTANCE LEARNING

Dr. Almighty Cortezo TABUENA
ORCID: 0000-0002-5875-3617
Senior High School, High School Department
Espiritu Santo Parochial School of Manila, Inc.
Manila, PHILIPPINES

Elena Garcia VILLAREAL
ORCID: 0000-0002-0774-629X
Student Behavior Management Head, High School Department
Espiritu Santo Parochial School of Manila, Inc.
Manila, PHILIPPINES

ABSTRACT

Despite the promising outcome of modular distance learning, its implementation is challenging. Thus, this study aimed to examine the usefulness and challenges of the implemented clustered self-directed learning modules in entrepreneurship for senior high school distance learning amidst the emerging pandemic using the descriptive-survey research method. This study was conducted at Espiritu Santo Parochial School of Manila, Inc., during the school year 2021–2022, among Grade 12 students using a stratified proportional random sampling technique. The study used both quantitative and qualitative methods of analyzing the data, including descriptive statistics and thematic analysis. As a result, all the modules were inferred to be very effective and very useful in terms of their usefulness for distance learning. On the other hand, there were six emergent themes from twenty-five challenges, as follows: (a) difficulties and limitations in theoretical and practical processes; (b) concerns about time constraints and academic workloads; (c) technical issues in learning modules; (d) problems with communication, lessons, and instructions; (e) issues with online learning, connectivity, and learning management systems; and (f) external and personal challenges as a student. These challenges were the basis in framing the recommendations of the students in addressing the aforementioned emergent themes.

Keywords: Challenges, distance learning, entrepreneurship, learning module, self-directed, usefulness.

INTRODUCTION

Countries around the world temporarily closed their educational institutions due to the spread of the new coronavirus infection known as COVID-19 (Alea et al., 2020; Escalona, 2022; Punzalan, 2022). For a couple of months, the outbreak turned out to be a global health emergency. Because of this, global leaders strictly imposed travel restrictions and the closure of local and international businesses and commerce, which caused the global economic recession. In connection to this, the World Health Organization (WHO, 2020) advised the conduct of an alternative, remote learning set up as a way to mitigate the virus spread. This, moreover, responds to preventing the loss of learning and provides remote learning opportunities while schools are closed. Moreover, the program gives guiding principles and delivery of online classes and approaches to be given by stakeholders like teachers and parents (World Bank, 2020). In this case, teachers, students, and the school are still adjusting to distance learning education in the Philippines despite the COVID-19 pandemic threat (Camero, 2022; Tugano, 2022).

In the Philippines, face-to-face interactions between students and teachers have also been discontinued. The Philippines, like other Asian nations, is adjusting to the new norm for education. The Department of Education implemented Modular Distance Learning to ensure educational continuity and that every school continues to fulfill its objective and vision of offering high-quality instruction to every Filipino learner

(Borromeo, 2021; Department of Education, 2019; Tabuena et al., 2023). The use of learning modules encourages self-directed study and learning. The improvement of students' self-study or learning skills is one advantage of employing modules for instruction. Students could actively participate in learning a particular idea covered in the program. As they complete the duties outlined in the module, they might also grow in their feeling of accountability. The students could show improvement on their own with little to no help from others. Students learn how to learn in modules (Nardo, 2017).

In addition, modular instruction includes various choices and it is self-paced for students (Alea et al., 2020). Despite the promising effects of modular learning, there are still challenges in the implementation of this modality. It requires more self-control and motivation on the part of students; more preparation time and the absence of tangible rewards on the part of educators; and more administrative resources to track students and run various courses (Dochy, 1989; Joshi et al., 2023). In this light, this study aimed to examine the usefulness and challenges of the developed and implemented clustered self-directed learning modules in entrepreneurship for senior high school distance learning amidst the emerging pandemic.

The clustered self-directed learning modules in entrepreneurship were developed by one of the cluster schools and distributed to all of the schools in Clusters 5 and 6, including Espiritu Santo Parochial School of Manila, Inc., San Pablo Apostol Learning School, St. Joseph School-Gagalangin, Holy Child Catholic School, Manila Cathedral School, and San Rafael Parochial School. Thus, the quality of the learning transfer from this approach primarily relies on the quality, validity, and reliability of the content and instruction included in the provided modules. This was initiated to provide remarkable and substantial feedback in terms of the usefulness, challenges, and recommendations as experienced and perceived by the senior high school students on the use of the clustered entrepreneurship course modules for distance learning, for both modular and online distance learning.

Significance of the Study

This study aims to contribute to the growing body of instructional materials that answer the demands of the K-12 curriculum, particularly student-centered ones, and meet the standards of the curriculum. This study will establish that the entrepreneurship pedagogy could bridge the gap between the demands of the 21st century, especially in various modes of learning, catering to the needs of the students who will not be able to enroll in conventional education and the teaching of entrepreneurship through the developed instructional modules, which will be evaluated by the students. Specifically, this study attempts to prove that the modules will be useful for students and teachers. The content and methods that will be used are adjusted to the students' needs and abilities to be able to equip them with the necessary entrepreneurship competencies and achieve the standards set for them for their future endeavors. Students may clearly understand each lesson through the use of illustrations and links by means of supplementary audio-visual materials. Moreover, students will be involved in various activities in entrepreneurship that will help them develop their social, ethical, psychological, physical, and other values.

On the other hand, creativity among colleagues (entrepreneurship and non-entrepreneurship teachers) will develop in the preparation of the modules and other materials that will be used. There will be professional satisfaction in developing new skills and increased awareness and understanding of the students' abilities. The work is easier with well-prepared lessons in different modules, which can also be used once in a while as a variation for teaching to provide individual instruction to the students in order not to get bored with the usual teaching methods. They will be able to use, and learn how to develop and evaluate their own instructional materials that are shaped in their own classroom settings, which will make the teaching-learning process engaging and meaningful. For non-entrepreneurship teachers, it will serve as an aid or guide to facilitate easier entrepreneurship teaching.

Statement of the Problem

This study aimed to examine the usefulness and challenges of the developed and implemented clustered self-directed learning modules in entrepreneurship for senior high school distance learning amidst the emerging pandemic. Furthermore, it also aimed to address the following probing questions:

1. What is the perception of the senior high school students on the usefulness of the clustered entrepreneurship course modules for distance learning in terms of the following: (a) title, (b) objectives, (c) instructions to the learners, (d) content, (e) illustrations, (f) learning activity materials, (g) evaluative measures, and (h) physical aspects of the module?

2. What are the challenges experienced by the senior high school students in the use of the clustered entrepreneurship course modules for distance learning?
3. What are the recommendations or points for improvement in the clustered entrepreneurship course modules as perceived by the senior high school students?

METHOD

Research Design

The purpose of this research was to investigate the usefulness and challenges of the developed and implemented clustered self-directed learning modules in entrepreneurship for senior high school distance learning. This study used the descriptive-survey research method under the quantitative research design to examine the usefulness and challenges of the developed and implemented clustered self-directed learning modules in entrepreneurship for senior high school distance learning amidst the emerging pandemic. A descriptive research design was used to elicit information regarding current conditions (Tabuena, Hilario, & Buenaflor, 2021). On the other hand, survey research provides a quantitative or numeric description of trends, attitudes, or opinions of a population by studying a sample of that population (Creswell, 2009). Descriptive-survey studies are valuable in playing a large part in the development of instruments for the measurement of many things that would be employed in all types of descriptive-developmental research, such as data-gathering instruments and the formulation of policies at the local, national, or international level (Calmorin, 2010; Tabuena, 2023)—in this case, as a basis to enable entrepreneurial individuals, particularly students, to reach their full potential in the world of traditional and online entrepreneurship.

Participants

The participants of this study were determined through a stratified proportional random sampling technique, where the number of students in each section was proportioned as to the computed given population in each sample distribution (Tabuena, Hilario, & Buenaflor, 2021) among Grade 12 students, representing 30% of the total population (N = 307) of 127 (41.37%) actual samples from the three academic strands, Accountancy, Business and Management (ABM), Humanities and Social Sciences (HUMSS), and Science, Technology, Engineering, and Mathematics (STEM), conducted at Espiritu Santo Parochial School of Manila, Inc. in the school year 2021–2022, as shown in Table 1.

Table 1. Frequency and Percentage Distribution of the Required and Actual Sample

Academic Strand	Grade and Section	Population (N)	Required Sample (30%)	Actual Sample (n)	Percentage
Accountancy, Business and Management	Grade 12 - St. Margaret Clitherow	32	10	24	75.00%*
	Grade 12 - St. Nicholas of Myra	31	10	23	74.19%*
Humanities and Social Sciences	Grade 12 - St. Charles Borromeo	40	12	13	32.50%*
	Grade 12 - St. Vincent de Paul	40	12	12	30.00%*
Science, Technology, Engineering and Mathematics	Grade 12 - St. Alexander of Lyons	44	14	14	31.82%*
	Grade 12 - St. Bernward of Hildesheim	40	12	14	35.00%*
	Grade 12 - St. Isidore of Seville	40	12	12	30.00%*
	Grade 12 - St. Therese of Lisieux	40	12	15	37.50%*
Total		307	94	127	41.37%*

*Note. *Within the required sample (acceptable)*

Data Collection and Analysis

In terms of data gathering, both quantitative and qualitative methods were implemented in a sequential manner, through survey and open-ended questions, respectively, in the research questionnaire, as shown in Figure 1. The research questionnaire was distributed to Grade 12 senior high school students in all of the aforementioned academic strands from January to April 2022, the Second Semester of the School Year 2021–2022, as the researchers handled the students from different quarters.
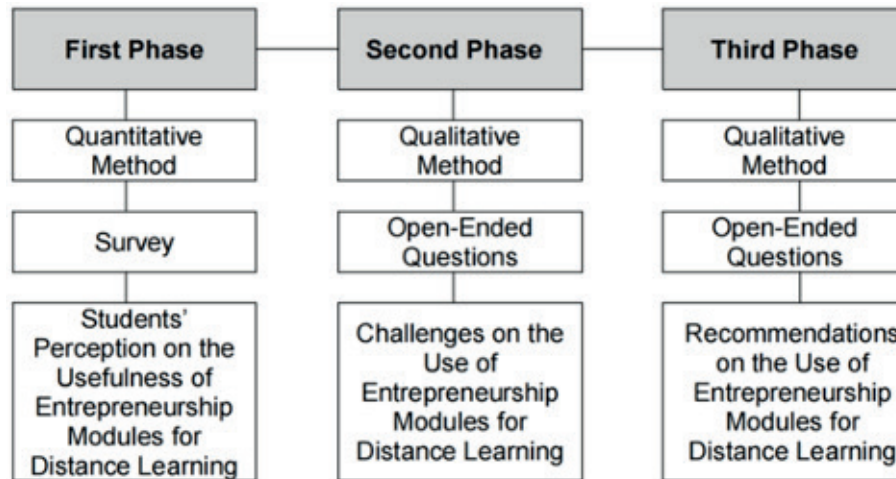
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│   Survey     │   │ Open-Ended   │   │ Open-Ended   │
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│  Students'   │   │Challenges on │   │Recommendations│
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│ Usefulness of│   │ship Modules  │   │ship Modules   │
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│ship Modules  │   │  Learning    │   │  Learning     │
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│  Learning    │   │              │   │               │
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Figure 1. Phases in the Data Collection

The study used both quantitative and qualitative methods of analyzing the data, including descriptive statistics such as frequency and percent distribution, average, weighted mean, and rank, as follows: (a) percentage - a proportion in relation to a whole, which is usually the amount per hundred and often denoted using the sign percent (%)—this will be used to describe the data vividly; (b) average - the the arithmetic mean, the sum of the numbers divided by how many numbers are being averaged; (c) weighted mean - used to compute and to determine the intensity of the response of the respondents to each behavioral indicator; and (d) rank - used to describe the order of data obtained in the research study, usually arranged from highest to lowest (Bravo et al., 2022; Calderon & Gonzales, 2011).

In terms of qualitative data for the open-ended questions in the research questionnaire, the data will be analyzed using language-based analysis, which will include content and thematic analysis of the data. Following this procedure, the researchers examined each response and combined the results into a narrative (Tabuena & Hilario, 2021). These narratives will be directed at the challenges and recommendations by means of the enumeration methodological tool for analyzing qualitative data, the process in which categories and the frequencies of codes, units of analysis, terms, words, or ideas are counted (LeCompte & Preissle, 1993). This will be the basis of a sequence of themes on the matrix (thematic map) on synthesizing the data on the use of clustered entrepreneurship modules for senior high school distance learning.

Research Instrument

There will be one evaluation form prepared to evaluate the usefulness of the clustered instructional modules for the students. The form is based on the guidelines for module writing and on an evaluation form written by Meyer (2016). The evaluation form for the students consists of 20 items that include the following components: (a) Title, (b) Objectives, (c) Instructions to the Learners, (d) Content, (e) Illustrations, (f) Learning Activity Materials, (g) Evaluative Measures, and (h) Physical Aspects of the Module. Items in the research questionnaire followed a four-point Likert scale format to determine the degree of judgment among the senior high school students on the usefulness and challenges of the developed and implemented clustered self-directed learning modules in entrepreneurship for distance learning. These responses will be tabulated through frequency distribution, including the frequency, percentage, weighted mean, and rank.

Rating scales will be analyzed using the following ranges (as shown in Table 2): 3.26 - 4.00 = Very Useful, 2.51 - 3.25 = Moderately Useful, 1.76 - 2.50 = Somewhat Useful, and 1.00 - 1.75 = Not Useful. This research instrument also includes open-ended questions for suggestions and recommendations as a basis for improvements and further revisions.

Table 2. Research Questionnaire Rating Scale

Rating	Range	Description	Interpretation
4	3.26 - 4.00	Very Effective	Very Useful
3	2.51 - 3.25	Moderately Effective	Moderately Useful
2	1.76 - 2.50	Somewhat Effective	Somewhat Useful
1	1.00 - 1.75	Ineffective	Not Useful

Ethical Considerations

In terms of data saturation, non-related, opposite, and/or irrelevant responses were excluded. In addition, the researchers will be responsible for the protection, from any risk and harm, of the students involved through following the proper procedures of the survey-questionnaire method. It will also guarantee the confidentiality and anonymity of the individual participants. In terms of data analysis, potential miscalculations will be prevented through statistical data management and software. Further, there is no future intimate information being disclosed during the data collection process.

FINDINGS

Students' Perception on the Usefulness of Clustered Entrepreneurship Modules for Distance Learning

Based on Table 3, Module 1, with the following topics such as Personal Entrepreneurial Competencies, Introduction to Entrepreneurship, The Salient Features of Entrepreneurship, and Misconceptions on Entrepreneurship, obtained a general weighted mean of 3.472, inferred to be very effective. All indicators in Module 1, such as the title, objectives, instructions, content, illustrations, learning activity materials, evaluative measures, and physical aspects of the module, were very effective. In this case, Module 1 is very useful for students in distance learning. The highest obtained average among the indicators was the physical aspects of the module, with an average of 3.541, inferred to be very effective, which specified that the type used for the text makes it easy to read; there are the right proportions of diagrams and photos; and the text is well arranged on the page so that it is easy to follow. On the other hand, the lowest obtained average among the indicators was the illustrations, with an average of 3.394, inferred to be very effective, which specified that necessary illustrations are included, a concept is provided with clear illustrations and examples, and illustrations are properly sequenced.

Table 3. Usefulness of Clustered Entrepreneurship Modules for Distance Learning in Module 1

Indicators	Average and Weighted Mean	Description	Interpretation
Title	**3.528***	**Very Effective**	**Very Useful**
The title is interesting.	3.496**	Very Effective	Very Useful
The title is relevant to the subject matter.	3.559**	Very Effective	Very Useful
Objectives	**3.520***	**Very Effective**	**Very Useful**
The objectives are clearly stated.	3.598**	Very Effective	Very Useful
The objectives are achievable.	3.441**	Very Effective	Very Useful

Instructions	**3.512***	**Very Effective**	**Very Useful**
The instructions are clear.	3.472**	Very Effective	Very Useful
There are instructions for all activities.	3.551**	Very Effective	Very Useful
Content	**3.454***	**Very Effective**	**Very Useful**
The ideas in the module are understandable.	3.425**	Very Effective	Very Useful
The ideas in the module are interesting and learning activities are provided.	3.441**	Very Effective	Very Useful
The concepts are supported with learning activities.	3.496**	Very Effective	Very Useful
Illustrations	**3.394***	**Very Effective**	**Very Useful**
Necessary illustrations are included.	3.402**	Very Effective	Very Useful
A concept is provided with clear illustrations and examples.	3.386**	Very Effective	Very Useful
Illustrations are properly sequenced.	3.394**	Very Effective	Very Useful
Learning Activity Materials	**3.417***	**Very Effective**	**Very Useful**
Specified materials are available.	3.402**	Very Effective	Very Useful
Learning materials are sufficient.	3.409**	Very Effective	Very Useful
Learning materials are properly sequenced.	3.441**	Very Effective	Very Useful
Evaluative Measures	**3.437***	**Very Effective**	**Very Useful**
Evaluative measures are congruent to the subject matter.	3.441**	Very Effective	Very Useful
Evaluative measures are worded clearly enough and adjusted to the student's level.	3.433**	Very Effective	Very Useful
Physical Aspects of the Module	**3.541***	**Very Effective**	**Very Useful**
The type used for the text makes it easy to read.	3.638**	Very Effective	Very Useful
There are right proportions of diagrams and photos.	3.465**	Very Effective	Very Useful
The text is well arranged on the page so that is easy to follow.	3.520**	Very Effective	Very Useful
General Weighted Mean	**3.472**	**Very Effective**	**Very Useful**

Note. N = 127; *Average of the Weighted Means; **Weighted Mean

Among the students' responses in accordance with the illustration component in Module 1 are the following: improvements in terms of clarity in photos and the accuracy of the modules as aligned with the teaching; some illustrations are not easily accessible; and a lack of examples. Some of the notable general remarks of the students are as follows: (a) all of the topics covered in the modules are sufficient, as is the necessary information for learning; however, a few more learning materials must be provided because some are inaccessible; (b) more detailed concepts and instructions are required for it to be self-explanatory; example situations for concepts should also be considered; activities that require more than one day to complete (should only be for evaluation parts such as Mini Performance Tasks or Major Tasks, and others); announcements for module changes should be made a week or two before the module is due to be completed (if any);and (c) to integrate better results with the subject matter, I believe the content should be aligned with the students' strand; let's say for STEM, examples of business connected with this strand should be integrated for better learning comprehension.

Table 4 shows the usefulness of entrepreneurship modules for distance learning in Module 2 with the following topics: The Physical and Societal Environment, Identifying and Recognizing Opportunities, and Business Idea Selection Checklist. The obtained general weighted mean of Module 2 was 3.511, higher than that of Module 1. All indicators in Module 2, such as the title, objectives, instructions, content, illustrations, learning activity

materials, evaluative measures, and physical aspects of the module, were very effective. The obtained general weighted mean of 3.511 was inferred to be very effective and very useful for the students in distance learning. The highest obtained average among the indicators was the physical aspects of the module, with an average of 3.583, inferred to be very effective; the same highest obtained average among the indicators in Module 1. On the other hand, the lowest obtained average among the indicators was the illustrations, with an average of 3.451, inferred to be very effective; the same lowest obtained average among the indicators as well in Module 1.

Table 4. Usefulness of Clustered Entrepreneurship Modules for Distance Learning in Module 2

Indicators	Average and Weighted Mean	Description	Interpretation
Title	**3.567***	**Very Effective**	**Very Useful**
The title is interesting.	3.520**	Very Effective	Very Useful
The title is relevant to the subject matter.	3.614**	Very Effective	Very Useful
Objectives	**3.551***	**Very Effective**	**Very Useful**
The objectives are clearly stated.	3.567**	Very Effective	Very Useful
The objectives are achievable.	3.535**	Very Effective	Very Useful
Instructions	**3.492***	**Very Effective**	**Very Useful**
The instructions are clear.	3.433**	Very Effective	Very Useful
There are instructions for all activities.	3.551**	Very Effective	Very Useful
Content	**3.475***	**Very Effective**	**Very Useful**
The ideas in the module are understandable.	3.441**	Very Effective	Very Useful
The ideas in the module are interesting and learning activities are provided.	3.472**	Very Effective	Very Useful
The concepts are supported with learning activities.	3.512**	Very Effective	Very Useful
Illustrations	**3.451***	**Very Effective**	**Very Useful**
Necessary illustrations are included.	3.488**	Very Effective	Very Useful
A concept is provided with clear illustrations and examples.	3.409**	Very Effective	Very Useful
Illustrations are properly sequenced.	3.457**	Very Effective	Very Useful
Learning Activity Materials	**3.494***	**Very Effective**	**Very Useful**
Specified materials are available.	3.520**	Very Effective	Very Useful
Learning materials are sufficient.	3.449**	Very Effective	Very Useful
Learning materials are properly sequenced.	3.512**	Very Effective	Very Useful
Evaluative Measures	**3.496***	**Very Effective**	**Very Useful**
Evaluative measures are congruent to the subject matter.	3.504**	Very Effective	Very Useful
Evaluative measures are worded clearly enough and adjusted to the student's level.	3.488**	Very Effective	Very Useful
Physical Aspects of the Module	**3.583***	**Very Effective**	**Very Useful**
The type used for the text makes it easy to read.	3.654**	Very Effective	Very Useful
There are right proportions of diagrams and photos.	3.535**	Very Effective	Very Useful
The text is well arranged on the page so that is easy to follow.	3.559**	Very Effective	Very Useful
General Weighted Mean	**3.511***	**Very Effective**	**Very Useful**

*Note. N = 127; *Average of the Weighted Means; **Weighted Mean*

There were no corresponding points for improvement mentioned by the students in accordance with the illustrations, as this indicator resulted in the lowest obtained average among other components, yet it was very useful and effective. Some of the notable general remarks made by the students in Module 2 are as follows: (a) the given topic/title for this particular module is truly relevant in the entrepreneurship course and the instructions were well discussed to the students in order for them to produce a quality output; (b) this module lacked learning materials to make the activities easier for the students; and (c) the concepts from Module 2 were sophisticated yet interesting, but in our experience, we were not able to fully encounter and grasp the other concepts provided by the constraints in time; just like in Module 1, a more systematically unified module with the concept connected together would be a help for students to understand the module better.

Table 5 shows the usefulness of entrepreneurship modules for distance learning in Module 3 with a topic of Product/Service Feasibility Analysis and Trademark. The obtained general weighted mean of Module 2 was 3.535, higher than that of Modules 1 and 2. All indicators in Module 3, such as the title, objectives, instructions, content, illustrations, learning activity materials, evaluative measures, and physical aspects of the module, were very effective. The obtained general weighted mean of 3.535 was inferred to be very effective and very useful for the students in distance learning. The highest obtained average among the indicators was the objectives, with an average of 3.606, inferred to be very effective, which specifies that the objectives are clearly stated and achievable. On the other hand, the lowest obtained average among the indicators was the illustrations, with an average of 3.488, inferred to be very effective; this was the same lowest obtained average among the indicators as well in the previous modules, Modules 1 and 2.

Table 5. Usefulness of Clustered Entrepreneurship Modules for Distance Learning in Module 3

Indicators	Average and Weighted Mean	Description	Interpretation
Title	**3.567***	**Very Effective**	**Very Useful**
The title is interesting.	3.528**	Very Effective	Very Useful
The title is relevant to the subject matter.	3.606**	Very Effective	Very Useful
Objectives	**3.606***	**Very Effective**	**Very Useful**
The objectives are clearly stated.	3.606**	Very Effective	Very Useful
The objectives are achievable.	3.606**	Very Effective	Very Useful
Instructions	**3.552***	**Very Effective**	**Very Useful**
The instructions are clear.	3.528**	Very Effective	Very Useful
There are instructions for all activities.	3.575**	Very Effective	Very Useful
Content	**3.507***	**Very Effective**	**Very Useful**
The ideas in the module are understandable.	3.488**	Very Effective	Very Useful
The ideas in the module are interesting and learning activities are provided.	3.520**	Very Effective	Very Useful
The concepts are supported with learning activities.	3.512**	Very Effective	Very Useful
Illustrations	**3.488***	**Very Effective**	**Very Useful**
Necessary illustrations are included.	3.472**	Very Effective	Very Useful
A concept is provided with clear illustrations and examples.	3.528**	Very Effective	Very Useful
Illustrations are properly sequenced.	3.465**	Very Effective	Very Useful
Learning Activity Materials	**3.501***	**Very Effective**	**Very Useful**
Specified materials are available.	3.535**	Very Effective	Very Useful
Learning materials are sufficient.	3.496**	Very Effective	Very Useful
Learning materials are properly sequenced.	3.472**	Very Effective	Very Useful

	Average and Weighted Mean	Description	Interpretation
Evaluative Measures	**3.516***	**Very Effective**	**Very Useful**
Evaluative measures are congruent to the subject matter.	3.535**	Very Effective	Very Useful
Evaluative measures are worded clearly enough and adjusted to the student's level.	3.496**	Very Effective	Very Useful
Physical Aspects of the Module	**3.575***	**Very Effective**	**Very Useful**
The type used for the text makes it easy to read.	3.598**	Very Effective	Very Useful
There are right proportions of diagrams and photos.	3.551**	Very Effective	Very Useful
The text is well arranged on the page so that is easy to follow.	3.575**	Very Effective	Very Useful
General Weighted Mean	**3.535**	**Very Effective**	**Very Useful**

*Note. N = 127; *Average of the Weighted Means; **Weighted Mean*

Among the students' responses in accordance with the illustrations component in Module 3 are the following: some examples or guides for our outputs so that we will be able to have an idea and follow the guides for a better output. Even though this indicator resulted in the lowest obtained average among other components, this particular component and the module itself are very useful and effective. Some of the notable general remarks made by the students in Module 3 are as follows: (a) the ideas in this module were easy to understand and relate to. However, there are some activities or the task itself that need to be explained further. In that way, the students can easily identify the needs and most important things in creating a product as well as in service feasibility; (b) this module can help and guide students to assess the factors that can affect a product or service, which could also help them if they are about to start or have a business; (c) as far as I remember, this topic was presented to us in a way that was on-point and clear since our teacher had provided a learning material (PPT). However, it could have been much better if the content of the PPT that was presented to us was also included in the module so that whenever we forgot something, we could always check it. The activities and tasks for this module were engaging and great practice; and (d) the module concept was easy to understand, and everything was essential for us to answer the evaluation.

In Module 4, as shown in Table 6, it shows the usefulness of entrepreneurship modules for distance learning with a topic of Introduction to Business Plan Preparation, with an obtained general weighted mean of 3.532, inferred to be very effective and very useful for the students in distance learning. Compared to other modules, it is higher than Modules 1 and 2, but lower than Module 3, with very minimal differences. The highest obtained average among the indicators was the objectives, with an average of 3.615, inferred to be very effective; the same highest obtained average among the indicators in the previous module, Module 3. On the other hand, the lowest obtained average among the indicators was the illustrations, with an average of 3.443, inferred to be very effective; the same lowest obtained average among the indicators as well in the previous modules, Module 1, 2, and 3.

Table 6. Usefulness of Clustered Entrepreneurship Modules for Distance Learning in Module 4

Indicators	Average and Weighted Mean	Description	Interpretation
Title	**3.602***	**Very Effective**	**Very Useful**
The title is interesting.	3.535**	Very Effective	Very Useful
The title is relevant to the subject matter.	3.669**	Very Effective	Very Useful
Objectives	**3.615***	**Very Effective**	**Very Useful**
The objectives are clearly stated.	3.654**	Very Effective	Very Useful
The objectives are achievable.	3.575**	Very Effective	Very Useful

Instructions	**3.555***	**Very Effective**	**Very Useful**
The instructions are clear.	3.543**	Very Effective	Very Useful
There are instructions for all activities.	3.567**	Very Effective	Very Useful
Content	**3.522***	**Very Effective**	**Very Useful**
The ideas in the module are understandable.	3.528**	Very Effective	Very Useful
The ideas in the module are interesting and learning activities are provided.	3.480**	Very Effective	Very Useful
The concepts are supported with learning activities.	3.559**	Very Effective	Very Useful
Illustrations	**3.443***	**Very Effective**	**Very Useful**
Necessary illustrations are included.	3.433**	Very Effective	Very Useful
A concept is provided with clear illustrations and examples.	3.472**	Very Effective	Very Useful
Illustrations are properly sequenced.	3.425**	Very Effective	Very Useful
Learning Activity Materials	**3.491***	**Very Effective**	**Very Useful**
Specified materials are available.	3.512**	Very Effective	Very Useful
Learning materials are sufficient.	3.472**	Very Effective	Very Useful
Learning materials are properly sequenced.	3.488**	Very Effective	Very Useful
Evaluative Measures	**3.496***	**Very Effective**	**Very Useful**
Evaluative measures are congruent to the subject matter.	3.496**	Very Effective	Very Useful
Evaluative measures are worded clearly enough and adjusted to the student's level.	3.496**	Very Effective	Very Useful
Physical Aspects of the Module	**3.578***	**Very Effective**	**Very Useful**
The type used for the text makes it easy to read.	3.638**	Very Effective	Very Useful
There are right proportions of diagrams and photos.	3.520**	Very Effective	Very Useful
The text is well arranged on the page so that is easy to follow.	3.575**	Very Effective	Very Useful
General Weighted Mean	**3.532**	**Very Effective**	**Very Useful**

*Note. N = 127; *Average of the Weighted Means; **Weighted Mean*

In terms of illustrations in Module 4, the following is the feedback of the students: The business plan provided a clear and comprehensive example of a business plan. However, there were no learning materials provided in this module, which confused the students; additionally, no illustrations were provided. Some of the notable general remarks made by the students in Module 4 are as follows: (a) the content of the module is overall relevant but needs attention when it comes to the objectives achievable since it was a little bit hard to accomplish. For the instructions, it just needs more clarity. The same goes for the necessary illustration; (b) some parts of a business plan were not clearly presented; therefore, students still need definitions to understand the tasks and not just examples; (c) as for this topic, I have learned many insights on business, as it gives me an idea or background on planning and preparing the important things that we should do in opening our own business; and (d) the explanation of each part of the business plan is sufficient for the learner's understanding of how to do the plan.

Lastly, in Module 5, it shows the usefulness of entrepreneurship modules for distance learning with the following topics: The 7Ps of Marketing for New Ventures and Marketing Plan, with an obtained general weighted mean of 3.527, is inferred to be very effective and very useful for students in distance learning, as shown in Table 7. Compared to other modules, it is higher than Modules 1 and 2, but lower than Modules 3 and 4, with very minimal differences. The highest obtained average among the indicators was the physical aspects of the module with an average of 3.588, inferred to be very effective; the same highest obtained average among the indicators in

the previous modules, specifically in Modules 1 and 2; followed by the title component with an average of 3.587, inferred to be very effective, with a very minimal difference of 0.001. On the other hand, the lowest obtained average among the indicators was the illustrations, with an average of 3.467, inferred to be very effective; the same lowest obtained average among the indicators as well in all of the previous modules. There were no corresponding points for improvement mentioned by the students in accordance with the illustrations, as this indicator resulted in the lowest obtained average among other components, yet it was very useful and effective.

Table 7. Usefulness of Clustered Entrepreneurship Modules for Distance Learning in Module 5

Indicators	Average and Weighted Mean	Description	Interpretation
Title	**3.587***	**Very Effective**	**Very Useful**
The title is interesting.	3.559**	Very Effective	Very Useful
The title is relevant to the subject matter.	3.614**	Very Effective	Very Useful
Objectives	**3.548***	**Very Effective**	**Very Useful**
The objectives are clearly stated.	3.575**	Very Effective	Very Useful
The objectives are achievable.	3.520**	Very Effective	Very Useful
Instructions	**3.512***	**Very Effective**	**Very Useful**
The instructions are clear.	3.488**	Very Effective	Very Useful
There are instructions for all activities.	3.535**	Very Effective	Very Useful
Content	**3.509***	**Very Effective**	**Very Useful**
The ideas in the module are understandable.	3.535**	Very Effective	Very Useful
The ideas in the module are interesting and learning activities are provided.	3.488**	Very Effective	Very Useful
The concepts are supported with learning activities.	3.504**	Very Effective	Very Useful
Illustrations	**3.467***	**Very Effective**	**Very Useful**
Necessary illustrations are included.	3.472**	Very Effective	Very Useful
A concept is provided with clear illustrations and examples.	3.457**	Very Effective	Very Useful
Illustrations are properly sequenced.	3.472**	Very Effective	Very Useful
Learning Activity Materials	**3.501***	**Very Effective**	**Very Useful**
Specified materials are available.	3.472**	Very Effective	Very Useful
Learning materials are sufficient.	3.512**	Very Effective	Very Useful
Learning materials are properly sequenced.	3.520**	Very Effective	Very Useful
Evaluative Measures	**3.524***	**Very Effective**	**Very Useful**
Evaluative measures are congruent to the subject matter.	3.535**	Very Effective	Very Useful
Evaluative measures are worded clearly enough and adjusted to the student's level.	3.512**	Very Effective	Very Useful
Physical Aspects of the Module	**3.588***	**Very Effective**	**Very Useful**
The type used for the text makes it easy to read.	3.646**	Very Effective	Very Useful
There are right proportions of diagrams and photos.	3.528**	Very Effective	Very Useful
The text is well arranged on the page so that is easy to follow.	3.591**	Very Effective	Very Useful
General Weighted Mean	**3.527**	**Very Effective**	**Very Useful**

*Note. N = 127; *Average of the Weighted Means; **Weighted Mean*

Some of the notable general remarks made by the students in Module 5 are as follows: (a) developing a business plan teaches me about marketing and how to be strategic; (b) the title is intriguing, and the activities are simple to complete and understand; and (c) the objectives in this module were clearly stated and emphasized. Furthermore, it would be more interesting if the students could create a sample of these ventures so that they could experience and familiarize themselves with the subject; (d) because we rely more on modular learning due to the current situation, I recommend producing more detailed modules, demonstrating many examples, thorough explanations, clearer instructions, activities and reflections that are well-related to the topic, and so on. On the other hand, the overall module (including its activities and tasks) was fun and engaging; and (e) the topic of the module is conceptually interesting and easy to understand because of how the module presented the concepts and activities well. The activities adhered to and utilized the topic, which helped us apply it better.

Overall, the obtained general weighted mean of all the modules was 3.511, inferred to be very effective and very useful for the students in distance learning, as shown in Table 8; the physical aspects of the module as the highest obtained average among the indicators and illustrations as the lowest obtained average among the indicators.

Table 8. Summary Table on the Usefulness of Clustered Entrepreneurship Modules for Senior High School Distance Learning

Indicators	Average of the Weighted Means* and Description					General Weighted Average
	Module 1	Module 2	Module 3	Module 4	Module 5	
Title	3.528	3.567	3.567	3.602	3.587	3.570
	Very Effective	Very Effective	Very Effective	Very Effective	Very Effective	Very Effective
Objectives	3.520	3.551	3.606	3.615	3.548	3.568
	Very Effective	Very Effective	Very Effective	Very Effective	Very Effective	Very Effective
Instructions	3.512	3.492	3.552	3.555	3.512	3.525
	Very Effective	Very Effective	Very Effective	Very Effective	Very Effective	Very Effective
Content	3.454	3.475	3.507	3.522	3.509	3.493
	Very Effective	Very Effective	Very Effective	Very Effective	Very Effective	Very Effective
Illustrations	3.394	3.451	3.488	3.443	3.467	3.449
	Very Effective	Very Effective	Very Effective	Very Effective	Very Effective	Very Effective
Learning Activity Materials	3.417	3.494	3.501	3.491	3.501	3.481
	Very Effective	Very Effective	Very Effective	Very Effective	Very Effective	Very Effective
Evaluative Measures	3.437	3.496	3.516	3.496	3.524	3.494
	Very Effective	Very Effective	Very Effective	Very Effective	Very Effective	Very Effective
Physical Aspects of the Module	3.541	3.583	3.575	3.578	3.588	3.573
	Very Effective	Very Effective	Very Effective	Very Effective	Very Effective	Very Effective
General Weighted Average**	3.472	3.511	3.535	3.532	3.527	3.515
	Very Effective	Very Effective	Very Effective	Very Effective	Very Effective	Very Effective
Interpretation	Very Useful	Very Useful	Very Useful	Very Useful	Very Useful	Very Useful

*Note. *Rounded off; **Actual computation*

Challenges in the Use of Clustered Entrepreneurship Modules for Distance Learning

Table 9 shows the twenty-five (25) challenges to the use of clustered entrepreneurship modules for distance learning that were identified through content and thematic analysis and coding.Among the enumerated twenty-five (25) theme clusters, there were six (6) emergent themes as follows: (a) difficulties and limitations in theoretical and practical processes, (b) concerns about time constraints and academic

workloads, (c) technical issues in learning modules, (d) problems with communication, lessons, and instructions, (e) issues with online learning, connectivity, and learning management systems, and (f) external and personal challenges as a student.

Table 9. Emergent Themes on the Challenges in the Use of Clustered Entrepreneurship Modules for Distance Learning

Theme No.	Emergent Themes	Theme Clusters	f	%*
Theme 1	Difficulties and Limitations in Theoretical and Practical Processes	(1) Limitations on the Practical Activities (Outcome-based Activities)	10	31.25
		(2) Difficulty in Understanding the Topics or Concepts	8	25.00
		(3) Difficulty in the Thinking Process	7	21.88
		(4) Difficulty in Understanding the Terminologies	4	12.50
		(5) Difficulty in Accomplishing the Activities	2	6.25
		(6) Difficulty on the Learning Retention	1	3.13
		Total	**32**	**100.00**
Theme 2	Concerns About Time Constraints and Academic Workloads	(1) Limited Time Allotment	17	70.83
		(2) Unnecessary and Excessive Activities	7	29.17
		Total	**24**	**100.00**
Theme 3	Technical Issues in Learning Modules	(1) Limited Illustrations and Examples in the Modules	7	43.75
		(2) Inaccessibility of the Links in the Modules	4	25.00
		(3) Sudden Modifications in the Modules	2	12.50
		(4) Unreadability of the Text in the Modules	1	6.25
		(5) Missing Information or Details in the Modules	1	6.25
		(6) Irrelevant Topics and Activities in the Modules	1	6.25
		Total	**16**	**100.00**
Theme 4	Problems with Communication, Lessons, and Instructions	(1) Inconsistencies in the Activities	8	50.00
		(2) Vague and Limited Explanations of Lessons, Instructions, and Activities	5	31.25
		(3) Limited or Lack of Communication	3	18.75
		Total	**16**	**100.00**
Theme 5	Issues with Online Learning, Connectivity, and Learning Management Systems	(1) Difficulty in the Distance Online Learning Modality	9	64.29
		(2) Internet Connectivity and Device Issues	3	21.43
		(3) Problems with the Learning Management System Integration	2	14.29
		Total	**14**	**100.00**
Theme 6	External and Personal Student Challenges	(1) Learning Distraction and Disinterestedness	2	33.33
		(2) Concerns Regarding the Module Transition	1	16.67
		(3) Difficulty in Collaboration	1	16.67
		(4) Difficulty on an Immediate Compliance	1	16.67
		(5) Irrelevant Topic to the Desired Course	1	16.67
		Total	**6**	**100.00**

*Note. *Rounded off*

Theme 1: Difficulties and Limitations in Theoretical and Practical Processes

Limitations on Practical and Outcome-based Activities: The students experienced difficulties and limitations in theoretical and practical processes such as the following: First, there were limitations on the practical activities (outcome-based activities); students were limited in the execution of their practical activities. This was the most frequent response of the students among the difficulties and limitations in the theoretical and practical processes. Some students stated that based on their experiences back then when they were in Grade 11, there were a lot of challenges that they experienced in the entrepreneurship course, which was a hindrance for them to advertise and run a small company that would be beneficial for them to learn more about the topics that they have gained. It gives them limitations to interact more and show their customers the products or services that they provide. In a likely manner, another challenge that they have experienced before is the lack of practice. Due to the limitations they have experienced, they did not have an opportunity to create and exceed the activities provided. In addition, students did not execute physical activities such as marketing strategies (Ajibade et al., 2023) and other strategies they had as they were in an online setup. It is difficult for them to do things in modules, to put their learning into practice, and to plan their business for creation, management, and sale, especially during pandemics.

Difficulty in Understanding the Topics and Concepts: Second, difficulty in understanding the topics and concepts; students were having difficulty understanding the topics and concepts in the lesson. Some of the students stated that there were certain topics that they would not be able to thoroughly understand. Thus, they may possibly be confused and get pressured. There are no face-to-face classes and the teaching and understanding is quite hard—to have a more uniform understanding of entrepreneurship while knowing that it can be interpreted in different ways depending on the given situation. Some students stated that it was difficult and confusing as it was the first time, especially in understanding some particular topics and some activities on their own. As time passed, they were slowly learning and getting used to it with the help of their teachers and through some additional references and guidelines. Also, the structure of the modules into sub-modules makes it hard to connect the concepts, especially if the given explanation is not thorough and detailed.

Difficulty in the Thinking Process: Third, difficulty with the thinking process; students were having difficulty with their thinking and brainstorming learning processes. Some of the students stated that it is not easy to plan their business; in this situation, they need to think of the most applicable topics and words that relate in accordance with their business or a particular scenario. With the problem of the pandemic, students actually need to brainstorm a lot in order to think about what businesses will be applicable, especially to those who are not into business or not business-minded individuals, requiring thorough research and assistance to master the art of creating a business plan. It is the hard part of entrepreneurship to create an idea and design for the business and how the parts will be allocated for it to be realistic.

Difficulty in Understanding the Terminologies: Fourth, difficulty in understanding the terminologies; students were having difficulty understanding the terminologies in the lesson. Some of the students stated that they found some of the key terms used somehow hard to understand in the module; there were a few of the terms used that were new and unfamiliar to them. Most of the time, students cannot ask their teacher due to a limited time in this case, and sometimes the information provided is lacking.

Difficulty in Accomplishing the Activities: Fifth, difficulty in accomplishing the activities; students were having difficulty in accomplishing the activities. Some of the students stated that activities become more complex on their end because they require even more research and more careful planning before they can actually get it done. According to the students, some activities were harder to accomplish not because of a lack of instructions but because the data gathering and answering processes required were more difficult than the concept given.

Difficulty on the Learning Retention: Lastly, for difficulties and limitations on theoretical and practical processes, there were difficulties with learning retention; students were having difficulties with learning retention. One of the students stated that it was easy to forget some of the topics and some of the activities were challenging to conduct.

Theme 2: Concerns about Time Constraints and Academic Workloads

Limited Time Allotment: The students experienced difficulties and limitations on time frames and academic workloads, such as the following: First, there was a limited time allotment; students experienced a limited time on their schoolwork. This was the most frequent response of the students among the difficulties and limitations on time and academic workloads. Some students stated that they were having a hard time making a business plan or how they focused on their business to work. Despite the fact that the learning materials were well provided and well utilized, they struggled to complete them due to a shortage of time. Due to the nature of distance learning, they felt under pressure to complete the modules as fast as possible, which made it difficult for them to comprehend the material and produce a high-quality product. In addition, since they were in their houses in distance learning mode, there were many distractions—household chores that can result in not finishing tasks on time; more likely, doing business in a pandemic itself is difficult already. Some of the students were also struggling to decide what the first thing to do was, especially when they had a lot of pending requirements due to the length of each module. Managing their time was really a challenging task for them in distance learning—making and managing their business plan for a limited time. It would be helpful for the students if the teachers could combine tasks to save a lot of time.

Unnecessary and Excessive Activities: Second, there were unnecessary and numerous activities; students also perceived that this concern contributed to a challenging distance learning experience. Some students stated that there were tons of requirements that needed to be submitted weekly in the course. Although they understand that all of it is important, it is just that there were many requirements that are due weekly and there were also so many revisions in the activity and evaluation parts that were only announced every online session yet still needed to be submitted before the week ends; the fact that there are still other subjects to lend their attention to. There were also some unnecessary, insignificant, and excessively long activities that consumed the time of the students (especially if they were required but not graded). In addition, there were too many tasks, which led to modifications and confusion for students. Some of the tasks can be quite redundant and unnecessary to accomplish again, such as those regarding business proposals and ventures. In this case, due to the large number of activities, distractions, and lack of attention, the students have experienced self-studying, poor internet connection, a lack of sleep, and a lack of time to answer all of the modules. They perceive that some tasks are really hard for them and the time allotted to finish them is lacking—making it hard for them to focus on other subjects.

Theme 3: Technical Issues in Learning Modules

Limited Illustrations and Examples in the Modules: The students experienced technical issues in the learning modules, such as the following: First, there were limited examples and illustrations in the modules. This was the most frequent response of the students among the technical issues in the learning modules. Some students stated that illustrations to guide them in creating a specific topic were somehow insufficient; examples given from the module were lacking. Thus, it confused students if they were writing it correctly and accurately. The modules' lessons, guidelines, and instructions presented were mostly imprecise and inexact. Due to a lack of examples in some parts of the module, it was difficult for them to understand and conduct an answer. However, the downside of the developed modules, according to the students, is that some activities were not interrelated with some concepts discussed and enumerated in the conceptual part of the modules. In this case, more learning materials should be provided since the subject is kind of complicated to digest.

Inaccessibility of the Links in the Modules: Second, the inaccessibility of the links in the modules; students were unable to access some of the links in the modules. Some students stated that sometimes the link provided is not working. There were materials, like links, that could not be accessed by the students whenever they needed them. In addition, there should be other technical aspects to be remembered (such as the formatting in the business plan) that were not included in the module.

Sudden Modifications in the Modules: Third, the sudden modifications in the modules; students were also challenged regarding the sudden modifications and changes in the modules. Some of the students stated that there were a lot of changes in the modules. There were times that modifications were made for the betterment of the learning process and to help their learning experience be more convenient, but some were not.

Unreadability of the Text in the Modules: Fourth, the unreadability of the text in the modules; students were unable to read some of the text in the modules. One of the students stated that some of the text was blurred. This could contribute to the other challenges of the students, more likely the difficulties and limitations of theoretical and practical processes.

Missing Information or Details in the Modules: Fifth, there was missing information or details in the modules; students were unable to see some of the information or details in the modules pertaining to the lesson. One of the students stated that some details were missing or not presented in the module. This technical issue in the learning modules is more likely the reason why students were having difficulty understanding the terminologies, topics, and concepts.

Irrelevant Topics and Activities in the Modules: Lastly, due to technical issues in the learning modules, there were irrelevant topics and activities in the modules. One of the students stated that there were irrelevant and off-the-topic activities. Thus, there is a need to review and make necessary improvements to the technical issues in the learning modules for distance learning.

Theme 4: Problems with Communication, Lessons, and Instructions

Inconsistencies in the Activities: The students experienced problems with communication, lessons, and instructions, such as the following: First, there were inconsistencies in the activities. This was the most frequent response of the students among the problems with communication, lessons, and instructions. Some students stated that the schedule of a certain activity and the content of the activity itself should be strictly implemented and stick to the topic itself (not subject to change). Based on their narratives, there was one time when their subject teacher changed some activities in the module as the activities were complicated to answer; it was not announced for all the sections, which made other students answer the said activities. It sparked confusion among them as it had to be changed suddenly; it would be better if all the activities that needed to be done were in the module already. There were modules that changed and specified only in their student portal, which made it hard to use. It would be helpful for them if the given modules were changed before the submission, making them do it as well in a short span of time. Altering the module every now and then may cause direct confusion for some students. As the modules were not designed personally by the school (directly by the school administrators or providers), there were a lot of adjustments created and it may have affected the subject flow as well as the students. In this case, as not all students were capable or had the ability to check their portal and/or attend online sessions, they only relied on the modules to learn and keep updated. Whether with great intentions or not, changing the modules with little to no time for adjustments was extremely stressful for them. Although this experience was addressed, the students believe that it would be best if this could be improved in the following school years.

Vague and Limited Explanations of Lessons, Instructions, and Activities: Second, there were vague and limited explanations of lessons, instructions, and activities. Some of the students stated that there were times in which instructions and activities were not properly explained or should be more detailed. Based on their narratives, the activities were not explained properly. That is why it is hard for them to do some of the activities. It was challenging for them because the use of online modules was more likely if certain topics were not understood immediately—questions were not entertained as soon as possible and some were shy about asking questions. In this case, there were some issues with the module, particularly the part about what to answer. The students hope that the instructions will easily elaborate more on the content, especially when it comes to identification (which should only focus on one answer) and imagery instructions.

Limited or Lack of Communication: Third, there was a limited or lack of communication. Based on the students' narratives, there was a lack of communication. Unlike during face-to-face, they could easily ask their teachers, and vice versa. Sometimes, it is hard for them to do the activity as some parts were confusing since they were just using the developed modules; some students were also having a hard time answering the activities. In addition to the inquiries regarding the modules, there were delays in email as well, just in case the online sessions were not available.

Theme 5: Issues with Online Learning, Connectivity, and Learning Management Systems

Difficulty on the Distance Online Learning Modality: The students experienced issues with online learning, connectivity, and learning management systems such as the following: First, there is difficulty in the online learning modality. This was the most frequent response among the students among the issues of online learning, connectivity, and learning management systems. Some students stated that it was difficult for them as not all of the students had a stable signal and not all of them were able to learn during the online set-up. In this online learning modality, some topics were not fully explained and presented. In addition, entrepreneurship is mostly about business and creating plans, strategies, and using other tools to be a successful entrepreneur. It is hard for them to take this subject online since they know that they would be more efficient and teach well if they were not in this set-up. It was difficult for them to understand each concept individually, especially when doing a business plan. The students committed errors unintentionally without knowing where they lacked. Furthermore, some of the activities require more physical contact, which is not available during the online set-up. It was hard for the students at first, but considering the situation, they accomplished it, but with limitations. For the students, it was hard for them to absorb what was just written in the modules; instead, it is fine to have a complete and clear lesson face-to-face, teach the subject in a face-to-face learning modality, and apply it to real situations right there. This transition from traditional (face-to-face) to a distance learning modality was difficult for the students to adjust to immediately. Despite the fact that it has limitations regarding the teaching-learning process, it was difficult for them to keep up in this kind of learning environment.

Internet Connectivity and Device Issues: Second, there were internet connectivity and device issues, as this distance learning requires technological assistance and support. Based on the students' narratives, there were times when they were having trouble communicating with their subject teacher because of the connectivity issue. Most of them experienced connectivity issues and device issues that prohibited them from doing the task, especially those who do not have the capacity to get the hard copy of the modules and just rely on soft copies. Thus, the internet connection contributed to a challenging experience among the students in distance learning.

Problems with the Learning Management System Integration: Lastly, for the issues of online learning, connectivity, and learning management systems, there was too much exposure to technological advancements as the students used the developed modules, that is, the problem of integrating the learning management system. According to the students, they are challenged to use the applications in all aspects of school life. It was very hard to immerse them in that learning process as it was new to them.

Theme 6: External and Personal Student Challenges

Learning Distraction and Disinterestedness: The students experienced external and personal challenges as well, such as the following: First, learning distractions and disinterestedness. This was the most frequent response of the students among the external and personal challenges as students. Some students stated that they get easily distracted or lose interest. Due to the large number of activities, distractions, and lack of attention, they have experienced self-study, poor internet connection, a lack of sleep, and a lack of time to answer all of the modules.

Concerns Regarding the Module Transition: Second, there were concerns about the transition to the use of modules. Based on the narratives of the students, they were still adjusting to the use of modules compared to the traditional mode of learning where the teachers were the ones who gave and facilitated the content of the subject.

Difficulty in Collaboration: Third, there was difficulty in collaborating. According to the students, this had been their problem since the start of online classes. It is difficult for them to keep up with other students, especially if the nature of the task requires a group effort. The participation and contributions of the group members were limited, but they maximized them as needed as it is part of the teaching-learning process.

Difficulty in Immediate Compliance: Fourth, there was difficulty with immediate compliance. Some of the students were not the same when it came to absorbing immediately the topic or lesson being discussed by the teacher. Since not all individuals are fast learners, there were difficulties in complying with the requirements. As aforementioned, in terms of collaboration, there were delays in submitting their part or parts of the requirements. In addition, this could result in the delay of submission, whether submitted individually or by group.

Irrelevant Topic to the Desired Course: Lastly, for external and personal challenges as a student, there were irrelevant topics to the desired course. This means a particular topic is not suitable for other fields of disciplines or professions in the future. The students in this case struggled to learn about the course subject because they were not good at business or it was not their career to be an entrepreneur.

Recommendations on the Use of Clustered Entrepreneurship Modules for Distance Learning

There were identified twenty-one (21) recommendations or points for improvement on the use of entrepreneurship modules for distance learning through content and thematic analysis and coding process as shown in Table 10. Among the twenty-one (21) theme clusters, there were six (6) emergent themes, as follows: (a) dealing with issues in communication, lessons, and instructions; (b) dealing with concerns about time constraints and academic workloads; (c) dealing with difficulties and limitations in theoretical and practical processes; (d) dealing with technical issues in learning modules; (e) dealing with issues in online learning, connectivity, and learning management systems; and (f) dealing with external and personal challenges as a student.

Table 10. Emergent Themes on the Recommendations on the Use of Clustered Entrepreneurship Modules for Distance Learning

Theme No.	Emergent Themes	Theme Clusters	f	%*
Theme 1	Addressing the Problems with Communication, Lessons, and Instructions	(1) Provide More Examples and Resources	25	60.98
		(2) Provide Detailed and Clear Instructions	8	19.51
		(3) Avoid Interchanging Activities	3	7.32
		(4) Avoid Sudden Modifications in the Activities	3	7.32
		(5) Make Efficient Communication	2	4.88
		Total	**41**	**100.00**
Theme 2	Addressing Time Constraints and Academic Workload Concerns	(1) Provide Adequate Time Allotment	11	84.62
		(2) Adjust the Length of the Activities	2	15.38
		Total	**13**	**100.00**
Theme 3	Addressing the Difficulties and Limitations in Theoretical and Practical Processes	(1) Provide Outcome-based and Practical Activities	6	50.00
		(2) Help the Students to Make a Practical Business	2	16.67
		(3) Relate Activities and Evaluations to Concepts	2	16.67
		(4) Include a Definition of Terms Before the Concepts	2	16.67
		Total	**12**	**100.00**
Theme 4	Addressing the Technical Issues in Learning Modules	(1) Provide Illustrations and Visual Representations	5	41.67
		(2) Review, Revise and Finalize the Learning Modules	3	25.00
		(3) Provide an Answer Sheet	2	16.67
		(4) Focus on Significant Concepts and Learning	2	16.67
		Total	**12**	**100.00**
Theme 5	Addressing the Issues with Online Learning, Connectivity, and Learning Management System	(1) Maximize the Time Frame for Online Sessions	3	42.86
		(2) Consider the Teaching-Learning Process for Distance Learning	2	28.57
		(3) Give Fair Assessment and Evaluation	2	28.57
		Total	**7**	**100.00**
Theme 6	Addressing the External and Personal Student Challenges	(1) Make the Module Course Interesting	5	71.43
		(2) Interconnect the Concepts and Activities	1	14.29
		(3) Allot Schedule for Other Modes of Submission	1	14.29
		Total	**7**	**100.00**

*Note. *Rounded off*

Theme 1: Addressing the Problems with Communication, Lessons and Instructions

The following are the recommendations for addressing the problems in communication, lessons, and instructions: (a) provide more examples and resources - more examples and further explanations regarding business matters (from planning to implementation), visual-based learning resources for learners to better comprehend ideas, more sites or links that may help in answering the modules, lesson references, example output as a point of reference, and more materials that would be beneficial for students to explore more, gain knowledge, and find the course interesting; (b) provide detailed and clear instructions—more detailed, clear, and complete subject presentation; fixed and step-by-step instructions; detailed information; and make things simple and understandable for students, as not all of them can cope quickly; (c) avoid interchanging activities: avoid interchanging activities to do, keep the tasks within the modules as they are (no separate tasks given without prior announcement or instruction), and ensure that the activities in the module are the ones that should be answered; (d) avoid sudden modifications in the activities - it would be better to give modifications or corrections before the start of the week and not in the middle of the week; and (e) make efficient communication - students need better communication to understand the activities.

Theme 2: Addressing Time Constraints and Academic Workload Concerns

The following are some suggestions for dealing with time constraints and academic workloads: (a) provide adequate time allotment—give more time to finish the modules, more time on online sessions, minimize the tasks assigned to students while maintaining the objectives; some requirements require extensive time when it can be shortened; it would be helpful if teachers could cooperate and make the tasks easier for the students to adjust their time in answering and submitting them on time; it would be appreciated if the modules had fewer activities and evaluations; and (b) adjust the length of the activities - adjust the length of the activities to better cater the submission requirements, each module has too many activities which makes it harder for the students to adjust their time in answering and submitting it on time, it is appreciated if the modules will have lesser activities and evaluations—better if the relevant parts will be be included and exclude the ones that are not that significant.

Theme 3: Addressing the Difficulties and Limitations in Theoretical and Practical Processes

The following are the recommendations for addressing the difficulties and limitations in theoretical and practical processes: (a) provide outcome-based and practical activities—more learning activities; allow students to conduct business in other locations for a large number of target markets and people who require products and services in rural areas; continue performance tasks that are engaging and great practice; reduce the use of essays; and try to incorporate activities and games that are related to the topic that may help the students understand and remember the lesson; (b) help the students to make a practical business - not every student has the ability or desire to start their own business. It is recommended to help the students improve their skills in business; more examples to help students comprehend the material better and to motivate them to complete their tasks; (c) relate activities and evaluations to concepts - each part of the module should be related to the concept part and create a more systematized module, especially the interconnection of the concepts and activities; and (d) include a definition of terms before the concepts - give the students a definition of terms before proceeding to the discussion of the qualities of an entrepreneur. It may not be difficult for some to understand and learn from the definitions of terms, but there are students who are not into vocabulary that may cause confusion, especially in this distance learning modality.

Theme 4: Addressing the Technical Issues in Learning Modules

The following are the recommendations for addressing the technical issues in the learning modules: (a) provide illustrations and visual representations: more detailed, clear, and complete presentation of subjects, learning activities, or graphic organizers are helpful to have a better understanding in the entrepreneurship course, as it helps the student to have an organized knowledge about the topics in the course; having illustrations attracts students and makes it easier for them to visualize what was being stated; module that is only filled with text would make the students lose interest in the topic; (b) review, revise, and finalize the learning

modules - review the modules first before finalizing on what the students must do. Make sure that the modules are up-to-date and finalized before they are given to the students. It is recommended to proofread the module first before distributing it to the students; (c) provide an answer sheet - provide an answer sheet so that it would be easy for the students to track which activity should be done and to avoid confusion on how it should be done, and to have a bigger space for answering; and (d) focus on significant concepts and learning - it is recommended that the modules will be less wordy and emphasize only the important things—better if only the important parts are included and leave out the less important ones.

Theme 5: Addressing the Issues with Online Learning, Connectivity, and Learning Management System

The following are the recommendations for addressing the issues of online learning, connectivity, and learning management systems: (a) maximize the time frame for online sessions—more time on online sessions so that the activities are well explained; more hours of online sessions on different days; and minimize the tasks assigned to students because the time allotted is insufficient for how many tasks should be completed; and (b) consider the teaching-learning process for distance learning—both teachers and students should go along during the distance learning so that they can easily understand each other and be successful; and (c) give fair assessment and evaluation - give the students to present their business proposal so the teacher can give them feedback with their output, it is also recommended that teachers would not grade the student based on how other students did well—if other students' work did not caught or appeal the teacher's eyes, then try to focus on the students' work content alone.

Theme 6: Addressing the External and Personal Student Challenges

The following are the recommendations for addressing the external and personal challenges as a student: (a) make the module course interesting - make the students interested in the course subject because this will help them to answer the modules and tasks with what they have learned; more interesting activities and learning experiences for the students to discover other things about the course; (b) interconnect the concepts and activities - create a more systematized module, especially the interconnection of the concepts and activities; and (c) allot schedule for other modes of submission - have a schedule for submitting the hard copies of the modules to other distance education learning modalities.

DISCUSSIONS AND CONCLUSION

This study aimed to contribute to the growing body of instructional materials that respond to K-12 demands, particularly student-centered demands, and meet curriculum standards. This study established that entrepreneurship pedagogy could bridge the gap between the demands of the twenty-first century, particularly in various modes of learning, catering to the needs of students who will be unable to enroll in traditional education and the teaching of entrepreneurship through developed instructional modules evaluated by the students. In this case, this study aimed to examine the usefulness and challenges of the developed and implemented clustered self-directed learning modules in entrepreneurship for senior high school distance learning amidst the emerging pandemic. In essence, the obtained general weighted mean of all the modules was inferred to be very effective and very useful for the students in distance learning; the physical aspects of the module as the highest obtained average among the indicators; and illustrations as the lowest obtained average among the indicators. According to Jaramillo (2002), teachers are aware that learning occurs when students are motivated. We should constantly work to create a rich learning environment and retain the students' high level of interest in order to achieve this goal. We should employ a range of instructional methods, resources, and incentive strategies to achieve this. Utilizing these resources increases students' interest in and enthusiasm for learning.

In contrary to its effectiveness and usefulness, there were identified twenty-five (25) challenges on the use of clustered entrepreneurship modules for distance learning through content and thematic analysis and coding process. There were six (6) emergent themes among the twenty-five (25) theme clusters enumerated: (a) difficulties and limitations on theoretical and practical processes; (b) concerns on time frame and academic workloads; (c) technical issues in the learning modules; (d) problems with communication, lessons, and instructions; (e) issues with online learning, connectivity, and learning management systems; and (f) external and personal challenges as a student. These challenges were the basis for framing the recommendations of the students in addressing the aforementioned emergent themes on the use of clustered entrepreneurship modules for distance learning.

All aspects of teaching and learning in many institutions are altered by online education (Ajibade et al., 2022; Rochina-Chisag & Tabuena, 2022); there have been numerous empirical studies to look at problems with offering online courses, but few have combined earlier research and given an overview of these problems (Kebritchi et al., 2017). One of its challenges, according to Arthur-Nyarko et al. (2020), is the potential of mobile device use in distance learning. It argues that, despite issues with low access levels and expensive internet, distance education institutions can implement other policies in which distance learners use personally owned devices to access digital content to support their learning.

Aside from this, according to a study (Luaña, 2021), parents' malpractice in answering their kids' homework is a result of the challenges they face, including: their kids' poor reading and writing skills; their limited time due to work and housework; having too many kids to take care of; having difficult lessons and subjects; and having too many learning activities in the modules. If these issues are not resolved, modular learning will fail, and there won't be any learning at all. The author emphasized that parents should therefore be equipped and empowered to properly assist learning at home since they are the learning facilitators. In addition, the most reported challenges were lack of sufficient time for study, difficulties in access and use of ICT, ineffective feedback, and lack of study materials (Musingafi et al., 2015).

The following are the recommendations from the emergent themes of the study on the use of clustered entrepreneurship modules for distance learning: (a) in addressing the problems with communication, lessons and instructions: provide more examples and resources, provide detailed and clear instructions, avoid interchanging activities, avoid sudden modifications in the activities, and make efficient communication; (b) in addressing time constraints and academic workload concerns: provide adequate time allotment and adjust the length of the activities; (c) in addressing the difficulties and limitations in theoretical and practical processes: provide outcome-based and practical activities, help the students to make a practical business, relate activities and evaluations to concepts, and include a definition of terms before the concepts; (d) in addressing the technical issues in learning modules: provide illustrations and visual representations, review, revise and finalize the learning modules, provide an answer sheet, and focus on significant concepts and learning; (e) in addressing the issues with online learning, connectivity, and learning management system: maximize the time frame for online sessions, consider the teaching-learning process for distance learning, and give fair assessment and evaluation; and (f) in addressing the external and personal student challenges: make the module course interesting, interconnect the concepts and activities, and allot schedule for other modes of submission.

Planning classroom instructional materials, tests, and assessments requires determining what is to be measured and then defining it precisely so that tasks can be constructed that require the intended knowledge, skills, and understanding while the process of assessments is taking place, as it reflects various relevant measures in learning outcomes (Tabuena, Morales, & Perez, 2021). Since most institutions' assessment and evaluation practices heavily depend on students' perceptions, keeping track of students' expectations and performance is an essential quality control measure. In environments where students are the focus, quality monitoring systems are essential for enabling the monitoring and evaluation of critical outcomes such as those in this study.

BIODATA and CONTACT ADDRESSES of AUTHORS

Dr. Almighty Cortezo TABUENA is an Adjunct Professor (Lecturer) at the College of Arts and Sciences, Pamantasan ng Lungsod ng Valenzuela (University of the City of Valenzuela), Valenzuela City and a Senior High School Research Teacher in the High School Department, Espiritu Santo Parochial School of Manila, Inc., Philippines. He gained his Doctor of Philosophy (PhD) in Humanities Education at Lawrence Bible Institute, accredited by California University (USA), in 2023. He graduated Cum Laude from the Philippine Normal University (Philippines) in 2017 with a Bachelor's degree in Secondary Education, Major in Music Education and successfully completed all academic requirements for his Master of Arts in Education with a Specialization in Music Education at the same university. He also obtained his Master of Arts in Humanities Major in Music and Art Studies degree at Oceania Polytechnic and Technological University (New Zealand) in 2021; his Master of Education degree at Harvest Mission International University (USA) in 2022; and his Master of Arts in Social Sciences degree at the School of Business and Trade (Switzerland) in 2023. Furthermore, he is currently pursuing a Master in Project Management degree at the Universidad Isabel I (Spain) and his Doctor of Philosophy (PhD) in Leadership Major in Humanities at the West Visayas School of Theology (Philippines). His research primarily focuses on action research, assessment and evaluation, culture and the arts, educational research, humanities and social sciences, material development, and music. He has presented papers at institutional, local, and international conferences and published research articles in various local and international journals indexed in the ASEAN Citation Index (ACI), Web of Science (WoS), and Scopus. He is also invited as a resource speaker in different seminars related to education, music, and research and contributes to various international journals as a reviewer and editorial board member.

Almighty Cortezo TABUENA
Senior High School, High School Department
Address: Espiritu Santo Parochial School of Manila, Inc., Manila, Philippines
Email: almighty.tabuena@gmail.com

Elena Garcia VILLAREAL has been the Student Behavior Management Head at Espiritu Santo Parochial School of Manila, Inc. since 2022. Previously, she held various positions, including coordinator roles in the Araling Panlipunan (Social Studies) Department for both the Grade School and Junior High School. Additionally, she taught business and management-related courses in the Senior High School Department. She earned her Bachelor of Science in Secondary Education, Major in Social Studies, Minor in English, from San Pablo Colleges, Laguna, in 2000. Currently, she is pursuing a Master of Arts in Social Studies (with units) at Roosevelt College (Far Eastern University), Cainta, and a Master of Arts in Education Major in Educational Leadership and Management at St. Paul University, Manila. Her diverse interests include poetry, music, case analysis, theater arts, curriculum planning, educational management, and supervision.

Elena Garcia VILLAREAL
Student Behavior Management Head, High School Department
Address: Espiritu Santo Parochial School of Manila, Inc., Manila, Philippines
E-mail: elena.villareal.esps@gmail.com

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