

# LEARNING MODULE IN COOKERY

CIELITO TOBIAS JACINTO

[jacinto.cielito23@gmail.com](mailto:jacinto.cielito23@gmail.com)

*Private School Teacher, United Evangelical Church School, Villa Adelina Bubukal Santa Cruz Laguna*

---

## Abstract

This study aimed to determine the validity of the learning module in Cookery in the UNITED EVANGELICAL CHURCH SCHOOL SCHOOL. Specifically it sought answers to the following questions. What is the component level of the module with regards to acceptability of learning module in Technology and Livelihood Education in terms of features: usability, consistency, adaptability and aesthetic value? What is the feature level of the module relative to Student's Performance: Practical Test? What is the level of the students performance as to practical test? Do the components of the module has significant effect to the students performance of Grade 8? Do the features of the module has significant effect to the students performance of Grade 8?

The descriptive method of research was used and a teacher made questionnaire was utilized in gathering the data. Fifty Grade 8 students in Technology and Livelihood Education were chosen using the stratified random sampling technique. The data and responses were collected tabulated and interpreted using the appropriate statistical treatments of data. Weighted mean and standard deviation were utilized to determine the significant effect of the performance of the students.

The Grade 8 students of UECS got an average mean of 4.12 which implies that it is very evident when it comes to the relativity of the usability of the module. The significant effect of the components of the module on students performance as to practical test 0.2 and .09 found not significant. In terms of usability, consistency, adaptability, and aesthetic value obtained small relationship interpretation respectively found out not significant.

In terms of objectives of the developed module obtained a grand mean of 4.01 which means very acceptable. Simple and specific, attainable and measurable, time bound and directed to the pupil's learning inputs revealed an interpretation of agree. While the relevant to the learning inputs of the module revealed an interpretation of strongly agree.

The activities of the developed instructional module for the students, obtained a grand mean of 4.17 which means very acceptable. Performs the

expected outcome of the lesson, realistic and practical enhancement for the real-life situation, interactive performances among their groups or peers revealed an interpretation of agree. While the objectives of the lesson and to acquire knowledge and skills revealed an interpretation of strongly agree.

The general findings of the evaluation and validation of the learning module in Cookery in usability, consistency, adaptability, and aesthetic value obtained 0.41, 0.71, 0.60 and 0.80 and p-value of 0.685, 0.479, 0.555 and 0.635 which are found not significant. Significant effect of the components of the module on students performance as to practical test resulted to a t-value of 0.2, 0.8, 0.19 and 0.09 and a t-value of 0.986, 0.934, 0.848 and 0.929. which are found not significant.

*Keywords: Acceptability, Activities, Adaptability, Assessment, Contents, Instructional Learning Module in Cookery, Modular Approach, Objectives and Procedure*

---

## **1. Main text**

### **Introduction**

Many teachers felt pressured to finish entire context of a textbook within a year. However, due to the constraints, teachers are unable to do so, and get frustrated and even agonized over their failure. With the continuing search for the right techniques, methods and approaches that could help both teachers and students in achieving the full development of an individual. In the 4 years of teaching in the Private School as a teacher the researcher has seen differences between the students today and the students few years back. Most of the student today do not have the focus on studying and they lack interest in learning, most especially in the subject in Technology and Livelihood Education. The teacher would like to revise the learning module that can hook the interest of the students.

As indicated by Smith (2017) module does not to be build in the panacea for settling the current training program. A module is not an end in itself but instead a way to accomplish a compelling showing learning movement. It ought to be dealt with basically one sort of training device to utilize inside the setting of teacher-learner relationship. Using modules can be effective in different schools, especially those with inadequate libraries. Learning module can serve as an effective tool in acquiring more knowledge, skills, experience and an effective way in the teaching process.

### **Background of the Study**

A module is a particular kind of learning research which is basically a

self contained, self-sufficient unit of instruction. It is an arrangement of instructional materials and system that contains the fundamental components of guidelines, destination, learning exercises and it's value.

Republic Act 10533, also known as the Enhanced Basic Education Act of 2013 or Government K to 12 Program, gives adherence to the accompanying norms and standards, in developing the Enhanced Basic Education Curriculum (a) the curriculum will be student focused, comprehensive and formatively fitting and (b) the curriculum will be pertinent, responsive and look into based.

Also the law unmistakably expresses the rule II area 10.3 creation and development of locally produced teaching and learning materials. The curriculum shall develop proficiency in Cookery and the enrichment of the subject.

Cookery, as one of the areas of Technology and Livelihood Education, remains to be a vital part of the learning competencies in the K to 12 Basic Education. The knowledge and skills that can be developed in this course can serve as the foundation of entrepreneurial pursuit. It also help them prepare for their future.

Quality education is one of the premier objectives of any instruction framework. Quality Education can be dictated by academic excellence of the learner and nature of the scholarship.

The researcher intents to develop, evaluate and innovate Modules in Cookery for high school students and in her desire to contribute to the development of the new instructional materials to be adapted to the needs of the administration and the students.

#### **Statement of the Problem**

1. What is the level of acceptability of the learning module in Technology and Livelihood Education in terms of:
  - 1.1 objectives;
  - 1.2 contents;
  - 1.3 activities; and
  - 1.4 assessment?
2. What is the feature level of the module relative to:
  - 2.1 usability;
  - 2.2 consistency;
  - 2.3 adaptability; and
  - 2.4 aesthetic values?
3. What is the level of the students performance as to practical test?
4. Do the components of the module has significant effect to the students performance of Grade 8?

## 5. Do the features of the module has significant effect to the students performance of Grade 8?

### Research Methodology

This chapter describes strategies and method used to offer responses to issues from the former examination. This procedures incorporates inquiries about outline, subject to the investigation, populace in examining strategies, explore methodology, look into instruments, and factual test utilized as a part of treatment of information.

The research design employed the descriptive method in gathering and treating the data for the foregoing areas of studies.

According to Johnson and Christensen (2017) a) semi exploratory research outlines are the point at which one is occupied with considering circumstances and end results b) he can control the autonomous variable c) he can't utilize a more grounded trial plan due to down to earth or limitations.

Hence, these types of research designs were used to know the acceptability of the developed instructional module.

With the main focus of this study, the development and evaluation of instruction learning module for cookery for High School the whole population of teachers and students were used thus no sampling technique was utilized. There were 50 Technology and Livelihood Education (TLE) students in High School. Sampling is the method by which a researcher chooses a group of respondents the sample from a larger population and then formulating a universal assertion about the whole matter. The researchers used is purposive sampling, According to Tan (2016) Simple random sampling is the election on random basis of elements from sampling frame, wherein each element has an equal chance or probability of being chose as subject of the study.

The materials and instruments used for gathering data were the questionnaire-checklist, and the documentary analysis techniques, scattered sources. Crossman ( 2018) define purposive sampling as judgmental, selective or subjective sampling and a form of non-probability sampling on which researchers rely in their study. It requires researchers' prior knowledge on the purpose of the study for them to properly choose eligible participants. Furthermore, this type of sampling is useful when the researcher need to reach a targeted sample quickly

The researchers prepared the instruments used through readings of the questionnaire-checklist of other studies just to obtain some ideas. Finally the researcher was able to do and it was presented to her professor. After the adviser had corrected and approved the questionnaire the researchers will create a Google Forms together with the letter asking permission from the respondents to be part of

the study as well as the Teacher’s approval in conducting this study and in the distribution of the questionnaire to the respondents.

This study was conducted at the middle of the school year 2021-2022. After the approval of the title, the researcher made a further study on the research through different information gathered from the books, journals and the internet. Thereafter, the researcher started to formulate a survey questionnaire to be used as an instrument for the study and seek assistance from the expert for its validation.

After the validation, the researcher asked permission to the adviser and Dean of College of Teacher Education to distribute the questionnaires. Subsequently, after reviewing the questionnaires, the respondents answers went through the process of tabulation, computation and interpretation with the assistance of a statistician.

The responses of the respondents to the questionnaire checklist were carefully tallied, tabulated and organized including those derive from interviews, observation and documentary analysis. The data presented, analyzed and interpreted with the used of weighted mean, frequency counts, percentage and ranking system. The presentation, analysis and interpretation of the data will be based on the weighted mean as shown by the scale ranges as follows(Calderon,2018)

The table of equivalent which is the basis of the interpretation of the data will be :(Tan 2016)

<b>Weight</b>	<b>Scale</b>	<b>Verbal Interpretation</b>
4.50 above	5	Strongly Agree
3.50-4.49	4	Agree
2.50-3.49	3	Moderately Agree
1.50-2.49	2	Disagree
below 1.50	1	Strongly Disagree

**Theoretical Framework**

This study aimed to give a clear perspective of the study, the variables are presented in the form of a paradigm in terms of objectives, contents, activities, and assessment.

Instructional Module in Technology and Livelihood Education

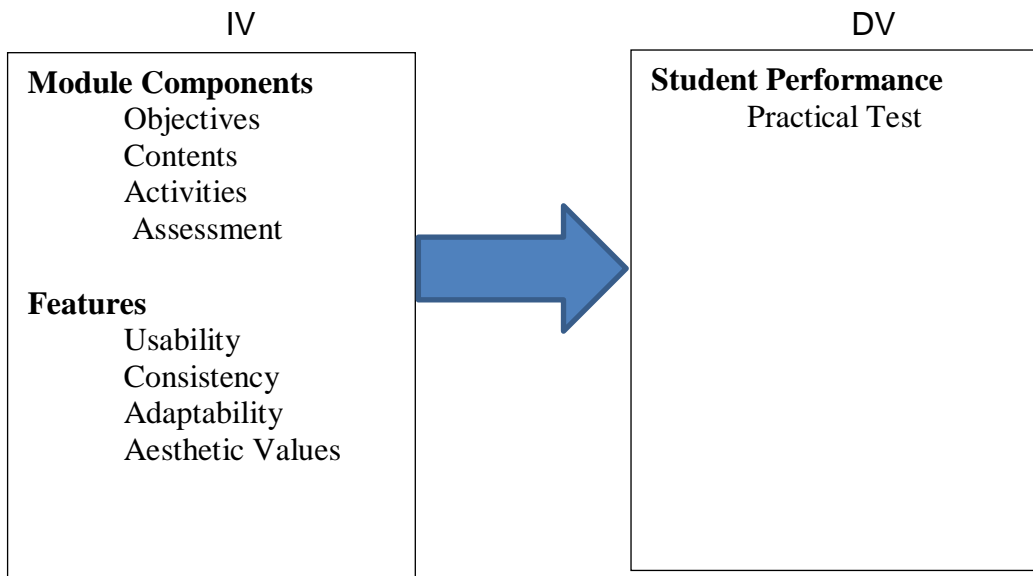


Figure 1. The Research Paradigm of the Study

**Results and Discussion**

**Table 1. Component Level of the Module in Terms of Objectives**

The objectives of the developed module...	Mean	SD	Remarks
... simple and specific.	3.98	0.89	Agree
... attainable and measurable.	4.00	0.74	Agree
... time bound.	3.71	0.82	Agree

... relevant to the learning inputs of the module.	4.21	0.74	Strongly Agree
... directed to the pupil's learning inputs.	4.15	0.80	Agree
<b>Grand Mean</b>	<b>4.01</b>		<b>Acceptable</b>

*Legend:*

Scale	Range	Remarks	Interpretation
5	4.20 – 5.00	Strongly Agree	Extremely Acceptable
4	3.40 – 4.19	Agree	Very Acceptable
3	2.60 – 3.39	Moderately Agree	Moderately Acceptable
2	1.80 – 2.59	Slightly Agree	Slightly Acceptable
1	1.00 – 1.79	Disagree	Not Acceptable

Table 1 illustrates the component level of the module with regards to acceptability of learning module in TLE in terms of objectives.

Among the statements above “The objectives of the developed module relevant to the learning inputs of the module” yielded the highest mean score (M=4.21, SD0.74) and was remarked as Strongly Agree. This is followed by “The objectives of the developed module directed to the pupils learning inputs.” with the mean score of (M=3.71, SD =0.82) yet was also remarked as Agree.

The component level of the module with regards to acceptability of the learning module in TLE in terms of objectives attained a mean score of 4.01 and was very acceptable among the respondents.

These further explicate that respondents’ agreed on the manifestation of the objectives in the developed module are highly acceptable.

Burn (2013) expressed the objectives ought to have the capacity to achieve after they have finished the task. Targets the practices, and or exhibitions toward which the students works. In a learning materials, objectives ought to be express impact on the students.

**Table 2. Component Level of the Module in Terms of Contents**

The lesson included in the module...	Mean	SD	Remarks
... is parallel to the curriculum.	4.00	0.90	Agree
... provides enough information on the topic presented.	4.31	0.83	Strongly Agree
... is fit, current and interesting to the learners.	3.96	1.03	Agree

... is presented in correct sequence and processes.	4.23	0.83	Strongly Agree
... contributes to obtain the ideas and understanding of the lesson.	4.40	0.76	Strongly Agree
<b>Grand Mean</b>	<b>4.18</b>		<b>Acceptable</b>

Table 2 indicates that the components of the learning module in terms of lesson was *very acceptable* as evidences by the grand (M=4.18). This explains further that the respondents *agreed* on the manifestation of the lesson in the developed module.

The respondents *strongly agree* that “*the lesson included in the module are relevant to the learning inputs of the module*” supported by the highest (M=4.40). However, the respondents *agree* that module “*is fit, current and interesting to the learners.*” which garnered the least (M=3.96, SD=1.03). This implies that the objectives of the developed conform with the criteria as evaluated by the respondents.

Table 3 shows as to what is the components of the learning module in terms of activities was *very acceptable* as evidences by the grand (M=4.17). This explains further that the respondents *agreed* on the manifestation of the lesson in the developed module.

The respondents *strongly agree* that “*the activities included in the module are relevant to the learning inputs of the module*” supported by the highest (M=4.52). However, the respondents *agree* that module needs improvement on “*interactive performances among groups or peers.*” which garnered the least (M=3.85, SD=1.03). This implies that the objectives of the developed conform with the criteria as evaluated by the respondents.

**Table 3. Component Level of the Module in Terms of Activities**

The activities of the developed instructional module for the students performs...	Mean	SD	Remarks
... the expected outcome of the lesson.	4.13	0.73	Agree
... realistic and practical enhancement for the real-life situation.	4.13	0.91	Agree
... interactive performances among their groups or peers.	3.85	1.03	Agree
... objectives of the lesson.	4.21	0.80	Strongly Agree

... to acquire knowledge and skills.	4.52	0.65	Strongly Agree
<b>Grand Mean</b>	<b>4.17</b>		<b>Acceptable</b>

As indicated by the popular announcement of Frobel (2012) "all learning comes through self-movement." This articulation has prompted rule that has overwhelming effect on the development of present day school. The activities/exercises included in the instructional learning module is a test if the students really understand the procedure.

According to Kizklik (2013) stated that assessment is perhaps the most complex and least understood of the terms. Inherent in the idea of evaluation is value. When we evaluate, what we are doing engaging in the same process that is designed to provide information that would help us make a judgment about given situation. One way to identify the learners who reach the mastery level and who need reinforcement. The material should be meaningful as to the users, the students be able to use it. It also should be appropriate to their age of effectiveness. It should provide a wide range of materials that will enrich and support the curriculum and course objectives

**Table 4. Component Level of the Module in Terms of Assessment**

The assessment that measures students' skills	Mean	SD	Remarks
... has pre-test and post assessment.	3.98	0.91	Agree
... serve as tools to determine students' performance based in every lesson.	4.19	0.89	Agree
... provide assessment tools to support multiple intelligences for the learners.	4.19	0.84	Agree
... give an opportunity for self-assessment for a particular topic.	4.23	0.72	Strongly Agree
... involve an appropriate list of questions that is align to the objectives.	4.27	0.89	Strongly Agree
<b>Grand Mean</b>	<b>4.17</b>		<b>Acceptable</b>

Table 4 shows as to what is the components of the learning module in terms

of assessment that measures students' skills was *very acceptable* as evidences by the grand (M=4.17). This explains further that the respondents *agreed* on the manifestation of the lesson in the developed module.

The respondents *strongly agree* that “*The assessment that measures students' skills*” supported by the highest (M=4.27). However, the respondents *agree* that module needs improvement on “pre-test and post assessment.” which garnered the least (M=3.98, SD=0.91). This implies that the objectives of the developed conform with the criteria as evaluated by the respondents.

Table 5 presents that the components of the learning module in terms of usability was *very acceptable* as evidences by the grand (M=4.12). This explains further that the respondents *agreed* on the manifestation of the objectives in the developed module.

**Level of the Module Features**

**Table 5. Feature Level of the Module Relative to Usability**

The Usability of the Learning Module...	Mean	SD	Remarks
... can be used independently.	4.08	0.90	Agree
... involves different activities that are easy to do.	3.94	1.04	Agree
... uses words or terms that are easy to understand.	4.06	1.06	Agree
... can served as handbooks or set of reference.	4.19	0.87	Agree
... is used as a tool for learning development among the students.	4.32	0.89	Strongly Agree

<b>Grand Mean</b>	<b>4.12</b>	<b>Acceptable</b>
-------------------	-------------	-------------------

The respondents *strongly agree* that “*the usability of the developed module used as a tool for learning development among the students*” supported by the highest (M=4.32). However, the respondents *agree* “*involves different activities that are easy to do*” which garnered the least (M=3.94, SD=1.04). This implies that the objectives of the developed conform with the criteria as evaluated by the respondents.

Milkova (2014) stated that validity is relating to the usefulness of the content as the researchers believed. The material should be meaningful as to the users, the students be able to use it. It also should be appropriate to their age of effectiveness of the module as well as it provides the necessary information for the student's use.

Table 6 presents that the components of the learning module in terms of consistency was very acceptable as evidences by the grand (M=4.24). This explains further that the respondents agreed on the manifestation of the objectives in the developed module.

The respondents *strongly agree* that “*consistency of the learning module focuses on the main objectives*” supported by the highest (M=4.35). However, the respondents *agree* that “*provides learning tasks that are parallel to the objectives of each topic*” which garnered the least (M=4.04, SD= .87). This implies that the objectives of the developed conform with the criteria as evaluated by the respondents.

**Table 6. Feature Level of the Module Relative to Consistency**

The Consistency of the Learning module...	Mean	SD	Remarks
... focuses on the main objectives	4.35	0.91	Strongly Agree
... consists topic that are logically related to the lesson	4.40	0.87	Strongly Agree
... achieves objectives for each lesson	4.25	0.86	Strongly Agree
... provides learning tasks that are parallel to the objectives of each topic	4.04	0.87	Agree
... contains topics that are interesting about agriculture	4.15	1.09	Agree
<b>Grand Mean</b>	<b>4.24</b>		<b>Extremely</b>

---

**Acceptable**

---

Rodil as cited by Magdaraog (2018) made a module that the findings revealed that module was assessed to be highly reliable and valid in terms of consistency of the content and objectives.

Table 7 presents that the components of the learning module in terms of adaptability was *very acceptable* as evidences by the grand (M=4.03). This explains further that the respondents *agreed* on the manifestation of the objectives in the developed module.

**Table 7. Feature Level of the Module Relative to Adaptability**

The adaptability of the learning module...	Mean	SD	Remarks
... provides opportunity for self –study.	4.23	0.95	Strongly Agree
... is adaptable to use across curriculum.	4.17	0.91	Agree
... can be a manual or a book which is not easy to provide.	3.71	1.11	Agree
... can be revised for some other purposes.	3.88	1.00	Agree
... provides different activities which is aligned in specific lesson.	4.19	1.04	Agree
<b>Grand Mean</b>	<b>4.03</b>		<b>Acceptable</b>

The respondents *strongly agree* that “*provides opportunity for self –study.*” supported by the highest (M=4.23). However, the respondents *agree that* “*can be a manual or a book which is not easy to provide*” which garnered the least (M=3.71, SD= 1.11). This implies that the objectives of the developed conform with the criteria as evaluated by the respondents.

Berger (2015) adaptability ought to include making diverse inquiries thinking about alternate point of view, thinking about the master plan and testing. According to her, adaptability is thinking about intricacy with a very surprising method for taking a gander at the world and changing the attitude. Since the world gets progressively perplexing as time passes by, being versatile is an incredible advantages.

Table 8 presents that the components of the learning module in terms of aesthetic value was *very acceptable* as evidences by the grand (M=4.31). This

explains further that the respondents *agreed* on the manifestation of the objectives in the developed module.

The aesthetic value of the Learning module in the developed module...	Mean	SD	Remarks
... uses suitable text design, font size and type.	4.21	0.99	Strongly Agree
... uses appropriate illustration/ pictures that apply for the topic.	4.48	0.82	Strongly Agree
... contains simple icons and visually clear images.	4.27	0.96	Strongly Agree
... has color pictures to get the attention of the readers and motivate them to answer.	4.35	0.98	Strongly Agree
...is printed in clear and easy to understand graphics.	4.25	0.98	Strongly Agree
<b>Grand Mean</b>	<b>4.31</b>		<b>Extremely Acceptable</b>

**Table 8. Feature Level of the Module Relative to Aesthetic Values**

The respondents *strongly agree* that “uses appropriate illustration /pictures that apply for the topic” supported by the highest (M=4.48). However, the respondents *agree* that “uses suitable text design, font size and type” which garnered the least (M=4.21, SD= .99). This implies that the objectives of the developed conform with the criteria as evaluated by the respondents.

Ramos (2014). She created and approved a photograph that composed instructional materials in English were clearly adequate and solid to the substance, abilities, fitting ness, dialect, structure and styles.

**Table 9. Level of the Students’ Performance as to Practical Test**

Grading Scale	Frequency	Percentage	Descriptors
90 – 100	32	67%	Outstanding
85 – 89	11	23%	Very Satisfactory
80 – 84	4	8%	Satisfactory
75 – 79	1	2%	Fairly Satisfactory
Below 75	0	0%	Did Not Meet Expectations
<b>Mean</b>	<b>92.00</b>		<b>Outstanding</b>

Table 9 presented the student’s performance in terms of practical test. It can be seen from the table that 32 or 67 percent of the students obtained an outstanding performance in activities. Moreover, 11 or 23 percent of the respondents got a very satisfactory performance, 4 or 8 percent obtained a satisfactory performance, 1 or 2 percent performed fairly satisfactorily. The mean of 92.00 indicates an *outstanding* performance of the students in the practical test. This means that the students’ performance at an average exceeds the normally high performance expected.

As stated by Lee (2015) exercises and activities from the "core" of the module set out the input-processing-output or the input practice task feedback sequence for each activity in turn. All in test questions self-assessment. feedback quizzes practical test should be included as part of the sequence.

### **Significant Effect of the Components of the Module on Students Performance**

The computed p-values were compared to the level of significance at 0.05 to

determine the significant effect of the components in terms of objectives, contents, activities, and assessment of the module on students' performance as to practical test. Revealed in the result below was the significant effect of the components in terms of objectives, contents, activities, and assessment of the module on students' performance as to practical test.

**Table 10. Significant Effect of the Components of the Module on Students Performance as to Practical Test**

Module Components	t-value	p-value	Analysis
Objectives	0.02	0.986	Not Significant
Contents	0.08	0.934	Not Significant
Activities	-0.19	0.848	Not Significant
Assessment	0.09	0.929	Not Significant

*\*significant at .05 level of significance*

It was manifested that the components of the module showed *no significant* effect on students' performance. The objectives of the module obtained p-value (0.986), contents obtained p-value (0.934), activities obtained p-value (0.848) and assessments obtained p value (0.929) which were all higher than (0.05) level of significance. This further implies that level of evaluation on components of the module may not affect the performance of the students in accomplishing their practical test.

A high assessment on the components of the module will not ensure high performance of the students and vice-versa. Process refers to what is done in order to accomplish a task. The output is, obviously, the accomplishment itself. If you can get the same outcome with less work involved, this would be an improvement.

**Table 11. Significant Effect of the Features of the Module on Students Performance as to Practical Test**

Features	t-value	p-value	Analysis
usability	-0.41	0.685	Not Significant
consistency	-0.71	0.579	Not Significant
adaptability	0.60	0.555	Not Significant
aesthetic values	0.48	0.635	Not Significant

*\*significant at .05 level of significance*

Revealed in the above result was the significant effect of the components in terms of practical test, usability, consistency, adaptability and aesthetic value of the module on students' performance as to practical test.

It was manifested that the components of the module showed *no significant* effect on practical test. The usability of the module obtained p-value (0.685), consistency obtained p-value (0.579), adaptability obtained p-value (0.555) and aesthetic values obtained p value (0.635) which were all higher than (0.05) level of significance. This further implies that level of evaluation on components of the module may not affect the performance of the students in accomplishing their practical test. A high assessment on the components of the module will not ensure high performance of the students and vice-versa.

### Summary of Findings

This study was geared towards the development and validation of the learning module in teaching Cookery in TLE. Specifically it sought answers to the following questions: What is the component level of the module with regards to usability, consistency, adaptability and aesthetic value? What is the feature level of the module relative to Student's Performance practical test? Do the components of the module has significant effect to the students performance of Grade 8? Do the features of the module has significant effect to the students performance of Grade 8?

Descriptive method of research was utilized to develop and evaluate the workbook in teaching Cookery. The respondents were Grade 8 students in the UNITED EVANGELICAL CHURCH SCHOOL School Year 2021-2022.

Modular distance learning is one of the learning modalities implemented to deliver continuous quality education. Thus, the development of learning modules

that aids quality teaching and learning to acquisition of desired learning performances.

In this study, the components of the learning module were described in terms of objectives, contents, activities and assessment and was determined by the weighted mean and standard deviation.

The students performance as to aesthetic value presented that the components of the learning module was extremely *acceptable*. This explains further that the respondents *agreed* on the manifestation of the aesthetic in the developed module.

However, the respondents *agree* “the objectives of the developed module were time bounded” garnered the least which means very acceptable, this implies that the objectives of the developed conform with the criteria as evaluated by the respondents.

There is a significant difference in the student’s performance in terms of practical test. It can be seen from the table that majority of the students obtained an outstanding performance in activities. Moreover, 23 percent of the respondents got a very satisfactory performance, 8 percent obtained a satisfactory performance, 2 percent performed fairly satisfactorily. The mean of 92.00 indicates an outstanding performance of the students in the practical test. This means that the students’ performance at an average exceeds the normally high performance expected.

Revealed in the above result was the significant effect of the components in terms of objectives, contents, activities, and assessment of the module on students’ performance as to practical test.

It was manifested that the components of the module showed no significant effect on students’ performance. The objectives of the module obtained p-value (0.986), contents obtained p-value (0.934), activities obtained p-value (0.848) and assessments obtained p value (0.929) which were all higher than (0.05) level of significance. This further implies that level of evaluation on components of the module may not affect the performance of the students in accomplishing their practical test. A high assessment on the components of the module will not ensure high performance of the students and vice-versa.

## Conclusion

Based on the findings presented in the previous chapter, conclusions were made:

There is no “significant” difference between the validation made by the respondents, the Grade 8 students of UNITED EVANGELICAL CHURCH SCHOOL on the results of validating the developed learning module in Cookery.

## Recommendations

This study was geared towards the development and validation of the learning module in teaching Cookery in TLE. Specifically it sought answers to the following questions: What is the component level of the module with regards to usability, consistency, adaptability and aesthetic value? What is the feature level of the module relative to Student's Performance practical test? Do the components of the module has significant effect to the students performance of Grade 8? Do the features of the module has significant effect to the students performance of Grade 8?

Descriptive method of research was utilized to develop and evaluate the workbook in teaching Cookery. The respondents were Grade 8 students in the UNITED EVANGELICAL CHURCH SCHOOL School Year 2021-2022.

Modular distance learning is one of the learning modalities implemented to deliver continuous quality education. Thus, the development of learning modules that aids quality teaching and learning to acquisition of desired learning performances.

In this study, the components of the learning module were described in terms of objectives, contents, activities and assessment and was determined by the weighted mean and standard deviation.

The students performance as to aesthetic value presented that the components of the learning module was extremely *acceptable*. This explains further that the respondents *agreed* on the manifestation of the aesthetic in the developed module.

However, the respondents *agree* "the objectives of the developed module were time bounded" garnered the least which means very acceptable, this implies that the objectives of the developed conform with the criteria as evaluated by the respondents.

There is a significant difference in the student's performance in terms of practical test. It can be seen from the table that majority of the students obtained an outstanding performance in activities. Moreover, 23 percent of the respondents got a very satisfactory performance, 8 percent obtained a satisfactory performance, 2 percent performed fairly satisfactorily. The mean of 92.00 indicates an outstanding performance of the students in the practical test. This means that the students' performance at an average exceeds the normally high performance expected.

Revealed in the above result was the significant effect of the components in terms of objectives, contents, activities, and assessment of the module on students' performance as to practical test.

It was manifested that the components of the module showed no significant effect on students' performance. The objectives of the module obtained p-value (0.986), contents obtained p-value (0.934), activities obtained p-value (0.848) and assessments obtained p value (0.929) which were all higher than (0.05) level of significance. This further implies that level of evaluation on components of the module may not affect the performance of the students in accomplishing their practical test. A high assessment on the components of the module will not ensure high performance of the students and vice-versa.

## References

- Ali, R., Ghazi, R., Khan, S., Hussain, S., & Faitma, T. (2010). Effectiveness of modular teaching in Biology at secondary level. *Asian Social Science*, 6(9), 49–54.
- Arban et al (2016), *Research, Teaching and Performance Evaluation in Academia: The Salience of Quality*;
- Argente et.al. (2017), *The Effect of Teaching Styles and Experience on Student Success in the Philippines*
- Babaan (2015). An examination of the relationship between the generation a teacher is born into, teaching style, and high school student engagement.
- Badillo A. (2015), "Poverty and Educational Achievement: Why Do Children From Lower Income Families Tend to Do Less Well At School?", *Benefits*, Vol. 15, No. 3, p. 283
- Bagwell (2016). *Different Teaching Styles and How they Affect your students.*, 7(1).
- Baltazar, T. W. (2015). Heuristics for designing enjoyable user interfaces: lessons from computer games. In *Proceedings of: conference on human factors in computing systems* (pp. 63–68). Gaithersburg, MD.
- Barnum (2013) *ISO, the International Organization for Standardization (9241-11)*:
- Berger (2015) *Self-reflection and interpersonal connection: Making the most of self-presentation . Translational Issues in Psychological Science*,
- Bizmanual Wong, H., T. (2013), "What the World Can Teach Us About New

- Teacher Induction,” *Phi Delta Kappan*, Vol. 86, No. 5, pp. 379-384.
- Braza (2017) *Campus-Based Practices for Promoting Student Success: Effective Pedagogy*. Research Brief. Midwest. High. Educ. Compact.
- Brookfield, Stephen (2012). *The Skillful teacher: on trust, technique and responsiveness in the classroom* (3rd ed.).
- Burden and Byrd (2017) *Burden-Methods-for-Effective-Teaching-Meeting-the-Needs-of-All-Students-6th-Edition*
- Burn (2017) Collaborative Learning enhances critical thinking. *Journal of Technology Education*, 7(1).
- Cacile (2009), “A Comparative Evaluation to Determine the Effectiveness of the Behaviour Support Classrooms and other Positive Behaviour Management Interventions in Designated Disadvantaged Schools”
- Calderon, K. A. (2018). *Collaborative learning: Higher education, interdependence, and the authority of knowledge*. Baltimore, MD: Johns Hopkins University Press.
- Chistova I. (2017) the place of instructional materials in curriculum development; “education and development”
- Crossman (2018) *A Matter of Style: The Teacher as Expert, Formal Authority, Personal Model, Facilitator, and Delegator Author(s): College Teaching*, 42(4)
- Crisostomo (2015) “Imagenet classification with deep convolutional neural networks,” *Advances in Information Processing Systems*, vol. 25, pp. 1097–1105, 2012.
- Davidson, N., & Major, C. H. (2014). *Boundary crossing: Cooperative learning, collaborative learning, and problem-based learning*. *Journal on Excellence in College Teaching*, 25 (3&4)
- Deriquito (2012), “School Improvement for Schools facing Challenging Circumstances: A Review of Research and Practice”, *School Leadership and Management*, Vol. 22, No. 3, pp. 243-256.
- Dick and Carrey (2016), “Adolescents’ perceptions of school environment, engagement, and academic achievement in middle school”, *American Education Research Journal*, Vol. 47, No. 3, pp. 633-662.

- Estalilla (2017). Students' perceptions of their teachers' teaching of mathematics: The case of Ghana. *International Online Journal of Educational Sciences*, 4 (2), 351-358.
- Foster et. al. (2016) Industrial internet: Pushing the boundaries of minds and machines. *Gen. Electr.* 21.
- Garantuza, B. A (2015) counseling and educational technology Calabar: Piaco Press Ltd National policy on education (Rvised 2018) Federal ministry of education, Lagos
- Glavin, K., Berger, C. (2015). Assessing Career Adaptability Using the Career Adapt-abilities Scale. *New Challenges for a New Era*, 207-220.
- Hanushek M (2017) General Education, Vocational Education, and Labor-Market Outcomes over the Lifecycle
- Holzinger, A., Ebner, M. (2017). Interaction and usability of simulations and animations: a case study of the Flash technology. In *Proceedings of: Interact 2003* (pp. 777–780). Zurich.
- John Dewey (2017), "Paying for high- and low-quality teaching", *Economics of Education Review*, Vol. 23, No. 4, pp. 411-430.
- Kizlik, B. (2017). How to Write an Assessment Based on a Behaviorally Stated Objective.
- Kurt, S. "Dick and Carey Instructional Model," in *Educational Technology*, November 23, 2015.
- Nielsen and Loranger (2016) Introduction: Why we need Maslow in the twenty-first century. *Society*, 54(6), 508-509.
- Lardizabal and Campos (2017) Relevance and positive and negative implications. *Universal Access in the Information Society*, 1-14.
- Lee (2015). *How people learn: Brain, mind, experience, and school*. Washington, D.C.: National Academy Press.
- Luna (2018), *The Relationship between Teachers Teaching Style, Students Engagement in School and Early School Learning*.
- Macarandang ( 2019), *Teaching Beliefs and Teaching Styles of Mathematics Teachers and their Relationship with Academic Achievements*.

- McGriff, S. J. (2000). Instructional system design (ISD): Using the ADDIE model. Retrived June 23, 2016
- Mercado, et al. (2013), "Organizing Instruction and Study to Improve Student Learning", National Center for Education Research
- Navel (2015) "Unsupervised representation learning with deep convolutional generative adversarial networks,"2015, 1511.06434.
- Nebrez (2017). Perceived and preferred teaching styles of Englishfor specific purposes (ESP) students.
- Nepomuceno F. C. , Modular Approach to Instruction, Instructional Technology in Practical Arts and Vocational Courses. 2014
- Odejar (2015), "Teachers, Schools and Academic Achievement", *Econometrica*, Vol. 73, No. 2, pp. 417–458.
- Orolfo (2013). Learning Styles of Teacher Education Students: Basis in improving the Teaching Learning Process
- Piaget (2016), "What it Takes to Make a Student", *The New York Times Sunday Magazine*
- Ramos (2016), Personal Epistimologies and Teachings Styles of Filipino Pre-Service Elementary Teachers: Implication to Teacher Education Preparation Program
- Rodil (2017). Teaching and learning are lifelong journeys. USA. Blue Mountain Press
- Sabado (2016 ). Teaching Strategies and Educational Alternatives Vol.1 and 2. Quezon City: Academic Publishing Corp
- Salandan, G. Teacher Education Journal. Quezon City: Katha Publishing Co., Inc. 2017
- San Juan (2017), "Quantifying the effects of teacher movements between schools in New Zealand: to schools that hath, shall be given", *Journal of Education Policy*, Vol. 19, No. 1, pp. 57-79
- Shataei (2010). Cooperative learning: Improving university instruction by basing practice on validated theory. *Journal on Excellence in College Teaching* 25, 85-118.

Silva, L. T (2007) The use of instructional materials in the teaching of science” (ed) in fundamental of education technology Unicross

Smith, T.(2017), “What are the effects of induction and mentoring on beginning teacher turnover?” *American Educational Research Journal*, Vol. 41, No. 3, pp. 681-714

Tan (2016) ( 2010), *Teaching Beliefs and Teaching Styles of Mathematics Teachers and their Relationship with Academic Achievements*

Valecina (2015), *Hitting the Target? A multi-level case study analysis of teacher policy in three states*, Economic Policy Institute, Washington, D.C