WWW.IJRPR.COM

International Journal of Research Publication and Reviews

Journal homepage: www.ijrpr.com ISSN 2582-7421

Revised Cookery Modular Instruction of Grade 10 Students Leading to Performance Task

Genevie C. Digao

Cotabato Foundation College of Science and Technology

ABSTRACT

This quantitative study aims to investigate revised cookery modular Instruction for Grade 10 students leading to Performance Task within the four (4) Districts of Matalam, Municipality of Matalam, Povince of Cotabato. Using the survey questionnaire, the respondents were answered all the questions. Results revealed that the revised cookery module has come across the student's needs. Moreover, the students can make use of the revised cookery module as it improves or cultivates their knowledge using this module as a learning tool. They suggested that Department of Education/administration improve styles of learning in the field of Cookery. As such, it will be a tool for them to effectively learn and obtain knowledge in their performance task.

INTRODUCTION

The spread of COVID-19 has brought a rapid change in the country not only in its economic stability but also in the education system. With that, the Department of Education then had to shift and craft realistic learning platform without compromising its objective to deliver a continuous and quality learning among its students and yet promoting health awareness (Pastor, 2020).

Blended learning is a combined face-to face with any or a combination of online distance learning, modular distance learning (MDL), and TV/radio-based instruction. Homeschooling is an alternative delivery mode that seeks to provide students with basic education in their homes with the aid of parents, guardians, or tutors (Llego ,2020).

Cookery as a subject is originally conceived as 'domestic science' and intended as a subject for girls, it was adapted into Home Economics in the 1970s and later found a place in the Craft, Design and Technology (CDT) suite of subjects. This came about because, in the early 1990s, Home Economics was close to being abolished as a method of cutting educational costs and was saved by being incorporated into the compulsory curriculum area of Design and Technology (Elliott, 2009).

Hence, the link between cookery modules and performance task of Grade 10 students is not well understood, it is critical to do this research study. To develop fresh insights, theory should be applied to specific research situations. There is a lack of theory, hence there is a gap (Bloch, Kranz, 2014). It clearly theorizes that a research without the theoretical framework lacks accurate direction to the search of appropriate literature and scholarly discussions of the findings from the research (Imenda, 2014).

This study will look into the evaluation of revised cookery revised cookery modular instruction for grade 10 students leading to performance task. Thus, this study also investigates the administrator and teachers' interventions to upgrade cookery modules in the local setting to ensure that quality education is still delivered to their respective learners.

Research Questions

This study aims to investigate revised cookery modular Instruction for Grade 10 students leading to Performance Task within the four (4) District of Matalam, Municipality of Matalam, Province of Cotabato.

1. What is the extent of revised cookery modular instruction leading to grade 10 students in terms of engagement, ability to meet students' needs, accuracy and visual appeal, ease of use, support, alignment to standards, depth of knowledge?

2. What is the level of students' performance task during course in terms of process and product?

3. Is there a significant relationship between revised cookery modular instruction and their performance?

4. Is there a significant influence of Revised cookery Modular Instruction on students' performance?

Scope and Limitation of the Study

The study will be limited to the revised cookery modular instruction and grade 10 students' performance task in four (4) Districts in Matalam, Municipality of Matalam, Province of Cotabato for the school year 2020-2021.

METHODOLOGY

Research Design

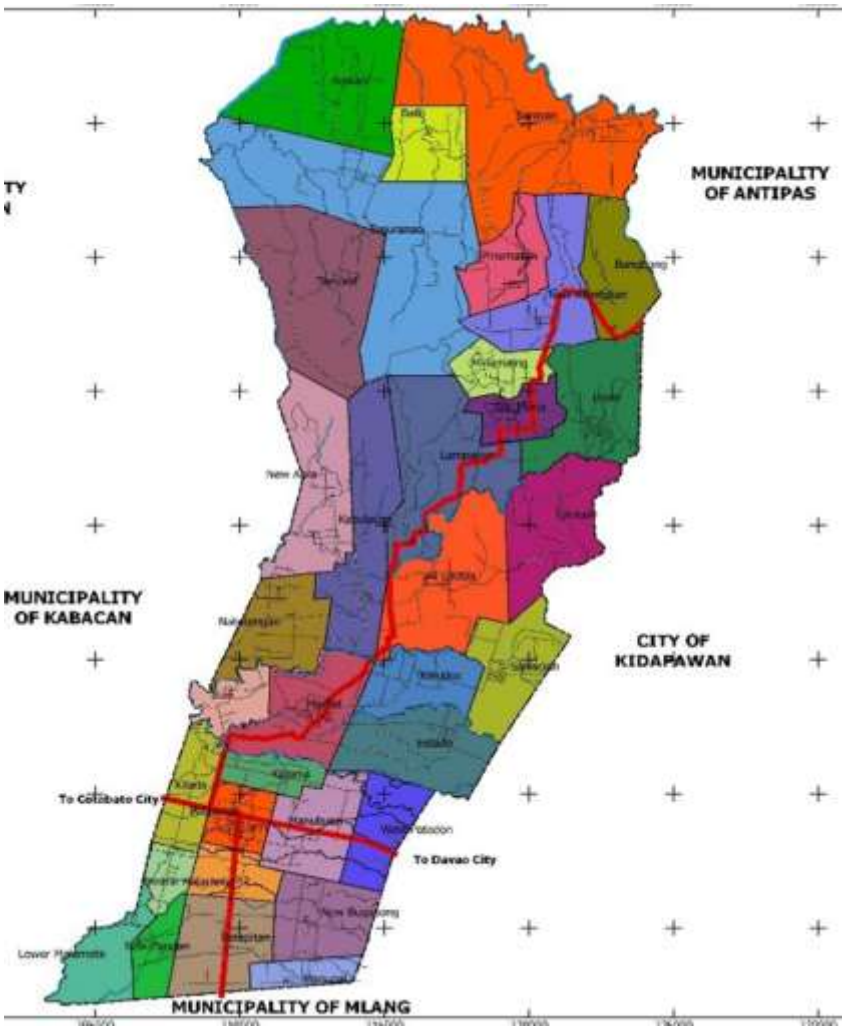
This study utilized the descriptive- correlational research design which is used to relate two or more variables. The descriptive method was used on evaluation of cookery modular instruction. Correlational research is a research designed to discover relationships among variables and to allow the prediction of future events from present knowledge. (Stangor, 2014).

In this study, the researcher determined the level of revised cookery modular instruction of grade 10 students in terms of accuracy and visual appeal, alignment to standards depth of knowledge, ease of use and support, engagement and ability to meet learners need, and the level of performance task of grade 10 students in terms of preparation process and final product. Simple statistics such as mean and percentage was used. Regression was used to determine the influence of revised cookery modular instruction on the performance task of grade 10 students.

Locale of the Study

This study aimed to determine the revised cookery modular instruction for Grade 10 leading to performance task. It was conducted in Municipality of Matalam, Province of Cotabato. The four (4) schools in Matalam; Agustin Valdevieso Sr. High School, Kibia High School, Matalam National High School (Linao) and Matalam High School (Poblacion) are the respondents.

Below is the map of the locale of the study.



The illustration shows the map of Matalam North Cotabato wherein the Districts of Public Secondary Schools situated (Municipality of Matalam l DILG)

Research Instrument

The research instrument I used in this study was the structured questionnaire checklist (Makram A., 2022). It contains the evaluation of revised cookery modular instruction among grade 10 students.

Sampling Procedure

The simple random sampling (Golzar, 2022) was employed on the distribution of survey questionnaire to the respondents in four (4) Districts in Matalam, Municipality of Matalam, Province of Cotabato.

Data Gathering Procedure

I was adhered to the following procedures in the gathering of the data. A letter was sent to the Schools Division Superintendent, District Supervisor, School Principals/Teachers-In Charge, and to the target informants and participants. The approval of the authorities played a crucial role for the continuity of the data gathering.

After getting the approval, the researcher personally distributed the survey questionnaires to the respondents and gathered them for consolidation, analysis and interpretation of data.

An adequate level of confidentiality Bos, (2020) of the research data will also be ensured. Any type of communication in relation to this research was done with honesty and transparency.

Data Analysis

The study analyzed the data using statistical tool such as: Mean will be used to test the revised cookery modular instruction for grade 10 students leading to performance task (Manikandan, 2011).

Ethical Considerations

I observed the following ethical considerations in this study:

The researcher followed the required processes in conducting this study. Full consent was obtained from the participants before the study and their privacy will be secured. An adequate level of confidentiality of the research data will also be ensured. Any type of communication about this research will be done honestly and with transparency.

Further, the research manuscript will be submitted to the Research Ethics Committee (REC) for review, ensuring that the standards of conduct and ethical principles are adhered to protect the dignity, rights, and welfare of research respondents/participants.

In addition, the privacy and confidentiality of the participants will be maintained by giving them free choice of whether to fill in their respective names in the research instrument or not. Only the researcher has the data about the participants involved in the study and must not be revealed in the presentation of the results thereafter.

In choosing who will form part as the respondents in this study, the researcher will ask their willingness to participate in this study. Hence, there will be no forcing or mandatory imposition of participation in the research. The respondents will also give a short orientation as to the purpose of the research.

Since COVID-19 is not totally eradicated, health and safety protocols such as wearing facemasks, physical distancing and hand sanitizing using alcohol or sanitizer will be properly observed during the conduct of the study. During the retrieval, the questionnaires will first be exposed to direct sunlight to minimize the transmission of the virus. Following all of these will result in a successful collection and completion of the data that are needed in the research study.

Finally, the researcher will extend gratefulness to the respondents considering their working time and for the inconvenience it may bring them in giving their responses to the research instrument.

RESULTS AND DISCUSSIONS

Revised Cookery modular instruction in terms of Accuracy and Visual Appeal

The first research question deals revised cookery modular instruction in terms of accuracy and visual appeal with the mean rating of 3.87 or agree.

The result revealed that the grade 10 cookery students were agreed that accuracy and visual appeal of revised cookery modules are related to assessed tasks; have appropriate illustrations and visuals; quality of the module is checked; modules are free from grammatical, spelling errors and inaccurate information and page layout and text style of learning module is well arranged. The accuracy and visual appeal of the revised cookery modules has a positive impact as it is set on its accuracy and visualization.

The findings of the study are aligned with the statement of Um, Plass, Hayward, & Homer (2012) that Visual elements do more than make an object look nice; they are an integral component of its ability to communicate the instructional content to the learner.

Table 1. Revised cookery modular instruction in terms of accuracy and visual appeal

No.	Statement	Mean	Description
1	Modules are related to the assessed tasks.	3.88	Agree
2	The quality of the module is checked.	3.81	Agree
3	The modules are free from grammatical, spelling errors and inaccurate information	3.71	Agree
4	The modules are accurately written and/or visually appealing	4.51	Strongly Agree
5	The modules have appropriate illustrations and visuals	3.84	Agree
6	The page layout and text style of learning module is well arranged.	3.71	Agree
7	The learning module stimulate interest in learning cookery	3.66	Agree
Weighted Mean		**3.87**	**Agree**

Students Performance Task in terms of Preparation Process

reflects the students' performance task in terms of preparation process with the mean rating of 3.59 or very satisfactory. Findings revealed that Grade 10 cookery students were very satisfactory in following the correct and proper procedure in the preparation process; Handling the tools used in the preparation; ensuring proper grooming in the cooking process; observing safety standards, cleanliness and orderliness and proper sanitary handling of food; and using only the proper and needed utensils and dishes.

This implies that preparation process is as ancient as humanity itself. It is a tale that begins with the primal act of harnessing fire, a discovery that forever changed the course of our culinary journey. It is not just a chronicle of techniques and tools; it is a narrative of human evolution, of our relationship with nature, and of our innate desire to create, innovate, and elevate (Cain, 2023).

In connection to the study, food preparation literacy is a newly defined term that explains an individual's capability to plan, manage, prepare, and eat food. It describes the complexity of skills, knowledge, and behavior that hinders daily food intake. It encompasses meal preparation, food preparation (e.g., cooking, assembling foods), and meal planning (e.g., grocery shopping). The distinction between meal preparation and food preparation is very vague, and sometimes not easily recognizable (Vidgen & Gallegos, 2014).

Table 2. Students performance task in terms of Preparation Process.

No.	Statement	Mean	Description
Following the correct and proper Procedure in the preparation process.		3.73	Very Satisfactory
2	Handling the tools used in the preparation.	3.68	Very Satisfactory
3	Ensuring proper grooming in the cooking Process.	3.59	Very Satisfactory
4	Observing safety standards, cleanliness and orderliness and proper sanitary handling of food	3.57	Very Satisfactory
5.	Keeping working table orderly while preparing the ingredients	3.40	Satisfactory
6.	Using only the proper and needed		

	utensils and dishes	3.57	Very Satisfactory
7.	Using time-saving techniques and devices	3.59	Very Satisfactory
8.	Following the recipe correctly	3.59	Very Satisfactory
Weighted Mean			

The third research problem focused on determining the significant relationship between revised cookery modular instruction and performance task of grade 10 students.

It can be gleaned in table 3 that revised cookery modular instruction were all positively and significantly related to Performance task of Grade 10 students. The significant correlation coefficient was interpreted (0.321) to high (0.732) relationship.

Therefore, the null hypothesis of the study is rejected.

It implies that as revised cookery modular instruction become high, the performance of grade 10 Cookery students also increases. With the modules prepared for the students, no learning time is lost since modules are ready for students to accomplish in the absence of the teachers.

More so, learners will benefit because they become independent and responsible attending to their individual tasks with minimal supervision. The value of independence among the students will manifest in their lives. Their proficiency and competency will grow (Nardo, 2017).

Engagement, ability to meet students' needs to preparation process with the Pearson Correlation of .541 * * indicates a moderate positive relationship. This suggests that as the level of engagement and the ability to meet students' needs increase in the effectiveness of the preparation process. While there is a relationship between these variables, it doesn't necessarily mean that increasing engagement and ability to meet students' needs directly causes an improvement in the preparation process. There could be other factors at play, or it could be that a better preparation process leads to increased engagement and ability to meet student's needs.

Engagement, ability to meet students' needs to final product with the Pearson Correlation of .518 * * indicates a moderate positive relationship. This means that as engagement levels and the ability to meet students' needs increase, there is a corresponding increase in the quality or effectiveness of the final product. While there is a relationship between these variables, it doesn't mean that increasing engagement and ability to meet students' needs directly cause an improvement in the final product. There could be other factors at play, or it could be that a better final product leads to increased engagement and greater ability to meet student's needs.

Accuracy and visual appeal to preparation process with the Pearson Correlation of .359 * * indicates a positive relationship, although a relatively weak one. This suggest that as the accuracy and visual appeal of a task increase, there is a corresponding, but uncertain, improvement in the preparation process. It is important that while there is a correlation between accuracy and visual appeal and the preparation process, correlation does not imply causation. Other factors may influence this relationship, and it is possible that a more effective preparation process leads to higher accuracy and visual appeal, rather than the other way.

Accuracy and visual appeal to final product with the Pearson Correlation of .274 * * indicates a weak positive relationship. This suggest that as the level of accuracy and visual appeal increase, there is a slight corresponding increase in the quality or effectiveness of the final product. The relationship between accuracy, visual appeal and the final product is not very strong.

Ease of use, support to preparation product with the Pearson Correlation of. 561 * * indicates a moderate positive relationship. This means that the ease of use, support increase, there is a corresponding increase in the effectiveness or efficiency of the preparation process.

Ease of use, support to final product with the Pearson Correlation of .430 * * indicates a moderate positive relationship. This suggest that as the ease of use and the level of support increase, there is a corresponding increase in the quality or effectiveness of the final product.

Alignment to standards, depth of knowledge to preparation process with the Pearson Correlation of .556 * * indicates a moderate positive relationship. This suggests that as the alignment to standards, depth of knowledge increase, there is a corresponding improvement in the effectiveness of the preparation process.

Alignment to standards, depth of knowledge to final product with the Pearson Correlation of .465 * ** indicates a moderate positive relationship. This suggests that as the alignment to standards, depth of knowledge increase, there is a corresponding development in the effectiveness of the final product.

The result of the study is in line to the statement of Lardizabal (2004). A module can be a short-segment program interwoven between other forms of instruction to cover limited, specific units rather than an entire course.

Table 3 Revised Cookery Modular Instruction on the performance task of grade 10 students

	Preparation Process	Final Product

Engagement, ability to meet students' needs	Pearson Correlation	**.541****	**.518****
	Sig. (2-tailed)	.000	.000
Accuracy and Visual Appeal	Pearson Correlation	**.359****	**.274****
	Sig. (2-tailed)	.000	.001
Ease of use, support	Pearson Correlation	**.561****	**.430****
	Sig. (2-tailed)	.000	.000
Alignment to standards,	Pearson Correlation	**.556****	**.465****
depth of knowledge	Sig. (2-tailed)	.000	.000

** Highly significant

The fourth research problem reflects that the learning engagement, ability to meet students' needs has significant influence in terms of preparation process. This finding showed enough evidence to reject the null hypothesis.

Its effect is only about 24.963% which means that 53.40% is attributed to other factors beyond the scope of the study. Engagement, ability to meet students' needs is found to be the best predictor of preparation process (t=3.848; prob=0.000).

This implies that focusing on improving these areas can lead to a more effective and efficient preparation process. Students engagement and meeting their needs can contribute to a more student-centered learning environment. This can lead to increased motivation, participation, and ultimately, better preparation outcomes (Van den Berghe et al., 2016).

Engagement, ability to meet students' needs to preparation process with the standardized coefficient Beta of .320 and the t-value of 3,848 * * indicate a significant influence. There is a corresponding increase which could be related to the effectiveness of the educational process or student performance. The t-value of 3.848 * *indicates that this relationship is statistically significant.

Ease of use, support to preparation process with the standardized coefficient Beta of .206 and the t-value of 1. 980* indicate a significant influence. An increase in the ease of use and support provided can lead to improvements in the preparation process.

Alignment to standards, depth of knowledge to preparation process with the standardized coefficient Beta of .276 and t-value of 2.688** indicate a significant influence. The t-value of 2.688** indicates that this relationship is statistically significant, with the probability of this occurring by chance being very low.

The result of the study conforms to the statement of Egan (2015) that many kitchens will have workstations with a standard mise en place set up, which might include a cutting board, salt and pepper, tasting spoons, composting containers, etc.

Table 4 Revised cookery Modular Instruction on students' performance in terms of Preparation Process

Model		Unstandardized Coefficients		Standardized Coefficients		
		B	Std. Error	Beta	t	Sig.
1	(Constant)	1.110	.278		3.994	.000
	Engagement, ability to meet students' needs	.324	.084	.320	**3.848****	.000
	Accuracy and Visual Appeal	-.052	.069	-.062	-.756	.451
	Ease of use, support	.203	.103	.206	**1.980***	.050
	Alignment to standards, depth of knowledge	.211	.078	.276	**2.688****	.008

R^2 = 0.420

F = 24.963**

Prob = 0.000

IMPLICATIONS

Implications for Practice

This research is timely and has been an eye-opener for each teacher. Even after the wrath brought by COVID-19 pandemic, its effect still lingers into the lives of teachers. Though some have already coped with it, there are still those who have been living in the midst of quandary and fear. It cannot be denied that everyone has different ways of viewing their mental health.

The department of Education/administration may provide grants to establish and implements other learning modalities that may enhance the personal development of Grade 10 cookery students.

The department of Education/administration improve styles of learning in the field of Cookery. As such, it will be a tool for them to effectively learn and obtain knowledge in their performance task. They can also assess through the output of this study which areas need more improvement.

The department of education/Administration/teacher may conduct trainings and seminars to parent/guardians in proper ways of facilitating teaching and learning process meaningfully at home. They must use the output of this study to continue their initiative in creating modules in Cookery. They will be more observant on some errors in their modules so that it will be more effective to the students. They will be guided to create more interesting materials to aid learners improve their knowledge in Cookery both by the book and through practical work.

Future Researchers. Finally, other researchers may found the result of the study beneficial in making similar studies. This will also invite interest from other researchers to validate results and may correlate it with other probable related variables.

Concluding Remarks

Based on the findings, data shows that the level of revised cookery module in grade 10 is agree in terms of in terms of accuracy and visual appeal, alignment to standards and depth of knowledge, ease of use, support, engagement and ability to meet learners need. It means that the revised cookery module has come across the student's needs.

Moreover, the students can make use of the revised cookery module as it improves or cultivates their knowledge using this module as a learning tool.

The output of the study displays that the student's performance task in terms of preparation process and final product are very satisfactory. This means that students have consistent findings on how they are able to use their skills satisfactorily.

Abad (2006). Learning Styles and Their Relation to Teaching Styles.

Amelia I., Driessnack M., Mendes C., Sousa V., (2007). An overview of research designs relevant to nursing: Part 1: Quantitative research designs Crit. Rev. Food Sci. Nutr., 50 (5) (2010), pp. 369-389

https://www.ncbi.nlm.nih.gov/pmc/articles/PMC4833401/

https://link.springer.com/article/10.1007/s10639-020-10375-1

Beaulieu J.C., and J.R. *Gorny*. (*2004)*. Factors Affecting Sensory Quality of Fresh-Cut Beecher, (1966) .https://www.kines.umich.edu/sites/default/files/eth_issues_in_human_research_quest_1993_45_32.pdf

Berry, (2023)._Conceptual approaches to acculturation. In K. M. Chun, P. Balls Organista, & G. Marín (Eds.), *Acculturation: Advances in theory, measurement, and applied research* (pp. 17–37) American PsychologicalAssociation. https://doi.org/10.1037/10472-004https://psycnet.apa.org/record/2002-18425-004

Berrett, D. (2012). How 'flipping' the classroom can improve the traditional lecture.

The Chronicle of Higher Education, 12, 1-14.

J Bos · (2020). Confidentiality

Bresnahan, T. F. (2010). Longitudinal Shifts in the Drivers of Satisfaction with Product Quality: The role of attribute resolvability. Journal, 16(2), 253-268.

Britt, M. (2015). How to better engage online students with online strategies. College Student Journal, 49(3), 399–404.

Brown, Amy. (2014). Understanding Food: Principles and Preparation: Engage Learning

Brookhaart S. (2013). How to Create and Use Rubrics for Formative Assessment and Grading

Bugler, D., Marple, S., Burr, E., Chen-Gaddini, M., & Finkelstein, N. (2017). Howteachers judge the quality of instructional materials. San Francisco, CA: WestEd.

Bundick, M.J.; Quaglia, R.J.; & Corso, M.J.; Dawn E. H (2013). Promoting Student Engagement in the Classroom Teachers College Record, v116 n4 2014.

Burney, D., & White, T. L. (2009). Research methods. Belmont, CA: Wadsworth Cengage Learning.

Chu YL, Storey KE, Veugelers PJ (2014). Involvement in meal preparation at homeis associated with better diet quality among Canadian children. J Nutr Educ Behav. 2014;46(4): 304–8. pmid:24238908

Corso M., Bundick M., Quaglia R.& Haywood D., (2013). Promoting Student Engagement in the Classroom. https://ucarecdn.com/dba5c18c-c833-4279- aaf0-c5f27496dd5d/

Cullen S.M. (2012) Employee Engagement Task Force "Nailing the evidence" workgroup.

Eckert, C., & Hughes, B. (2010). The root of the cause. Industrial Engineer Journal, 2(2), 38-43.

Egan B. (2015). Chapter 6 – Standardized Recipes

Elliot G. (2009). Issues Associated with Teaching Practical Cookery in UK Schools:

Evidence from Survey of Teaching Staff.

Shuey (2002). Views on Modular Assessment and Evaluation Process in Distance Education

Stangor C., 2014). https://opentextbc.ca/introductiontopsychology/chapter/2-2-psychologists-use-descriptive-correlational-and-experimental-research-designs- to-understand-behavior

Sumeracki, M. (2020). Six strategies for Effective Distance Learning. www.learning scientist.org.

Than and Viet, (2016). Learning through Tapping into Indigenous Knowledge Systems in the Science Classroom

Tolich, (2004). Protecting Respondent Confidentiality in Qualitative Research https://www.ncbi.nlm.nih.gov/pmc/articles/PMC2805454/

Um, Plass, Hayward, & Homer, (2012). Emotional Design in Multimedia Learning: Effectsof Multidimensional Concept Maps and Animation on Affect and Learninghttps://www.ejmste.com/download/emotional-design-in-multimedia-learning-effects-of-multidimensional-concept-maps-and-animation-on-5576.pdf

Vidgen, Helen Anna, & Gallegos, Danielle. (2014). Defining food literacy and its components. Appetite, 76, 50-59.