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Electronic Learning Instruction in Cookery Ii: It's Acceptability

Daryl Joe C. Mercado

Teacher III, of Pres. Corazon C. Aquino High School - Senior Department

ABSTRACT

This study examines the acceptability of Electronic Learning Instruction (ELI) in Cookery for Grade 11 students in District V, Division of City Schools, Manila. It aims to enhance the delivery of quality instruction and improve learner performance by assessing key aspects such as Learning Outcomes, Content, Activities, Evaluation, Organization, Language and Style, Navigation, and Usefulness. The research was conducted across five high schools: Manuel Araullo High School, Manila High School, Manuel A. Roxas High School, Ignacio Villamor High School, and President Corazon C. Aquino High School.

Through a mixed-methods approach combining surveys, interviews, and evaluations, the study analyzed the effectiveness of ELI in addressing the needs of technical-vocational education in Cookery. Findings highlight the strengths and areas for improvement in the implementation of e-learning tools, providing actionable recommendations for educators and policymakers. These insights aim to foster a more engaging and effective learning environment, ensuring better alignment with the competencies required in the Cookery curriculum.

Introduction

Nowadays, the use of technology is very evident in all sectors including the education. Educators have to come up with different teaching materials such as the multimedia instructional materials, printed materials and video technology materials which are all can be included in the electronic learning instructions. Electronic Learning also known as Cyber Days, Virtual Learning Days, or Online Learning days offers administrators the flexibility to continue classes even when school buildings are closed. Teaching can take place inside or outside the classroom, but the use of computers and the Internet form are the main components of electronic learning. Educational deliveries are made to multiple recipients at the same time or at different times. Previously, the system was not fully accepted as it was thought to lack the human element necessary for learning.

Department of Education Order No. 32 series of 2022 or commonly known as the "Guidelines on the Engagement of Servies of Learning Support Aides to Reenforce the Implementation of the Basic Eduaction Learning Continuity Plan in the the time of Pandemic, this policy ensured continued delivery of the basic education services amidst the COVID-19 pandemic through the provision of additional human resource to reinforce and render assistance to learners, teachers, and parents and/or guardians in the implementation of the distance learning delivery modalities at home.

Sub-Problem of the Study

This study aimed to determine the Electronic Learning Instruction in Cookery Grade 11 in District 5 in

Division of City Schools Manila.

Specifically, it sought to answer the following questions:

1. What is the extent of utilization of learning instruction in Cookery for Grade 11?
2. Based on the findings of the study, what learning instruction may be proposed?
3. How do school heads, teachers and TESDA Accreditors assess the the assess the Electronic Learning Instruction in teaching Cookery for Grade 11 in terms of:
   3.1. Learning Outcomes;
   3.2 Content;
   3.3 Activities;
   3.4 Evaluation;
   3.5. Organization;
   3.6. Language and Style;
   3.7. Navigation; and
   3.8. Usefulness?
4. Is there a significant difference between the assessments of the three groups of respondents as to the abovementioned variable?
5. How do the learners perform in the pre-test and post-test before and after using the proposed materials? Is there a significant difference if any?

Methodology

The study used the descriptive research method to get information through the use of survey questionnaire. Such method involves collection, presentation and analysis of a set of data in order to properly describe the various features of the set of data.

The respondents of the study is consisted of five (5) school heads, and sixty-nine (69) Teachers, and eleven (11) TESDA Accreditors a total of eighty-five (85) respondents.

Result and Discussion

Table 7 Extent of Utilization of Learning Instruction

Indicators	School Heads		Teachers		TESDA Accreditors		Composite		Rank
	WM	VI	WM	VI	WM	VI	WM	VI	
1. Books	4.60	HU	3.81	U	4.00	U	3.88	U	6
2. Modules	4.80	HU	4.38	HU	4.09	U	4.36	HU	1
3. Workbook	4.80	HU	3.75	U	4.00	U	3.85	U	7
4. Compilation of Lessons	4.80	HU	4.17	U	4.27	HU	4.22	HU	4
5. Films/Filmstrips	4.60	HU	4.22	HU	4.36	HU	4.26	HU	2
6. DepEd TV	4.80	HU	3.36	MU	2.55	LU	3.34	MU	8
7. Infographics such as charts and diagrams	4.80	HU	4.19	U	4.27	HU	4.25	HU	3
8. Electronic Learning Instructions	5.00	HU	4.04	U	4.27	HU	4.12	U	5

Overall Weighted Mean	**4.78**	**HU**	**3.99**	**U**	**3.98**	**U**	**4.04**	**U**	

Table 1 shows the assessment of the extent of utilization of learning instruction rated as Utilized with an overall weighted mean of 4.04. Four (4) items rated as Highly Utilized, namely: modules with a composite weighted mean of 4.36 as rank 1; film/filmstrips with a composite weighted mean of 4.26 as rank 2; and infographics such as charts and diagrams with a composite weighted mean of 4.25 as rank 3; and compilation of lessons with a composite weighted mean of 4.22 as rank 4. Three (3) items rated as Utilized, such as: electronic learning instructions with a composite weighted mean of 4.12 as rank 5; books with a composite weighted mean of 3.88 as rank 6; and workbook with a composite weighted mean of 3.85 as rank 7. One (1) item rated as Moderately Utilized which is DepEd TV with a composite weighted mean of 3.34 as rank 8.

The findings is supported by Hizon (20180 that any resources a teacher uses to help him teach his students is in instructional material. It is important because they can significantly increase student achievement by supporting student learning. This process aids in the learning process by allowing the students to explore the knowledge independently as well as providing repetition.

Table 2 Summary Assessment on the Electronic Learning Instruction

Criteria	**School Heads**		**Teachers**		**TESDA Accreditors**		**Composite**		**Rank**
	WM	**VI**	**WM**	**VI**	**WM**	**WM**	**VI**	**WM**	
1. Learning Outcomes	4.53	HA	4.24	HA	4.38	HA	4.28	HA	3.33
2. Contents	4.13	A	4.22	HA	4.41	HA	4.24	HA	6.5
3. Activities	4.40	HA	4.28	HA	4.41	HA	4.30	HA	2
4. Evaluation	4.63	HA	4.20	HA	4.27	HA	4.24	HA	6.5
5. Organization	4.33	HA	4.27	HA	4.35	HA	4.28	HA	3.33
6. Language and Style	4.57	HA	4.25	HA	4.32	HA	4.28	HA	3.33
7. Navigation	4.66	HA	4.16	A	4.43	HA	4.23	HA	8
8. Usefulness	4.67	HA	4.30	HA	4.29	HA	4.32	HA	1
Grand Mean	**4.49**	**HA**	**4.24**	**HA**	**4.36**	**HA**	**4.27**	**HA**	

As revelaed in Table 2 the electronic learning instruction rated as Highly Acceptable with the grand mean of 4.27. All items rated as Highly Acceptable, these are: usefulness with a composite weighted mean of 4.32 as rank 1; activities with a composite weighted mean of 4.30 as rank 2; learning outcomes; organization; and language and style with a similar composite weighted mean of 4.28 as rank 3, 4, and 5; contents; and evaluation with both the composite weighted mean of 4.24 as rank 6 and 7; and navigation with a composite weighted mean of 4.23 as rank 8.

Table 3 Comparative Assessment of the Electronic Learning Instruction

Areas of Concern		SS	MS	df	F-value	Critical Value	Interpretation	Decision
1. Learning Outcomes	Bet. Grp Within Grp.	0.090 0.199	0.045 0.013	2 15	3.41247	3.68	Not Significant	Accept Ho
2. Contents	Bet. Grp Within Grp.	0.041 0.095	0.020 0.004	2 21	4.58399	3.47	Significant	Reject Ho
3. Activities	Bet. Grp. Within Grp.	0.010 0.108	0.005 0.007	2 15	0.71284	3.68	Not Significant	Accept Ho
4. Evaluation	Bet. Grp. Within Grp.	0.103 0.184	0.051 0.008	2 21	5.85056	3.47	Significant	Reject Ho
5. Organization	Bet. Grp. Within Grp.	0.003 0.358	0.001 0.023	2 15	0.07132	3.68	Not Significant	Accept Ho
6. Language and Style	Bet. Grp Within Grp.	0.056 0.134	0.028 0.007	2 18	3.76220	3.55	Significant	Reject Ho
7. Navigation	Bet. Grp Within Grp.	0.123 0.316	0.061 0.017	2 18	3.51852	3.68	Not Significant	Accept Ho
8. Usefulness	Bet. Grp. Within Grp.	0.091 0.104	0.045 0.004	2 24	10.5342	3.40	Significant	Reject Ho

As revealed in Table 3, the computed F-values are: learning outcomes with 3.41247, activities with 0.71284, organization with 0.07132, and navigation with 3.51852 were lower than the critical values of 3.68 with 2, 15, 15, 15 and 18 degree of freedom. Hence, there is no significant difference on the electronic

learning instruction for learning outcomes, activities, organization and navigation as assessed by school heads, teachers and TESDA Accreditors. Therefore, the hypothesis is accepted. On the other hand, the computed F-values of the following: contents with 4.58399, evaluation with 5.85056, language and style with 3.76220, and usefulness with 10.5342 were higher than the critical value of 3.47, 3.47, 3.55 and 3.40 with 2, 21, 21, 18 and 24degree of freedom at 0.05 level of significance. Hence, there is significant difference on the electronic learning instruction for contents, evaluation, language and style and usefulness as assessed by school heads, teachers and

Table 4 Learners Performance of Grade 11 in Cookery

Pretest		**Posttest**		**Overall**	
MPS	**DE**	**MPS**	**DE**	**MPS**	**DE**
55.77	A	92.68	CAM	74.23	MTM

As presented in Table 4, the overall performance of Grade 11 in Cookery rated as Moving Towards Mastery with 74.23 Mean Percentage Score. As to pretest result rated as Average with Mean Percentage Score of 55.77 and post test result Closely Approximating Mastery with Mean Percentage Score of 92.68.

Table 5 Comparative Assessment on the Learners' Performance As to Pretest and Posttest

Pretest		**Posttest**		**df**	**Critical value**	**t-value**	**Decision**	**Interpretation**
MPS	**SD**	**MPS**	**SD**					
55.77	**3.29**	**92.68**	**18.29**	104	1.660	15.9196	Reject H_0	Significant

As shown in Table 5, the computed t-values on the Grade 11 learners' performance in Cookery between pretest and posttest is 15.9196 higher than the critical value of 1.660 with 104 degree of freedom at 0.05 level of significance. Hence, there is significant difference on the Grade 11 learners' performance in Cookery between pretest and posttest results. Therefore, the hypothesis is rejected.

Conclusions

From the findings of the study, the following conclusions are drawn:

1. The module is vastly used while the Electronic Learning Instruction in Cookery 11 is also beneficial in teaching Cookery 11.
2. The Electronic Learning Instruction in Cookery 11 are designed vehicles to efficiently transmit information for learning to take place.
3. The Electronic Learning Instruction in Cookery 11 contains all important aspects in the teaching and learning of learners, hence it make learning real and permanent.
4. The respondents share similar assessments on the acceptability of the Electronic Learning Instruction in Cookery 11.
5. The level of performance of the learners in the post-test differs significantly as compared to the pre-test.

Recommendations

In the light of the findings and conclusions, the following recommendations are given.

1. The School Administrators can maximize the innovation of learning instruction to elevate the quality of instructional materials in the teaching-learning process and ensure that the needs of the learners will be met.
2. The School Administrators of the Senior High School department might allot the members of senior high school faculty to devote time on the development of learning materials on LAC sessions, semestral break INSETs among others to produce a wide pool of tailored fit learning tools and materials.
3. The electronic Learning Instruction in Cookery 11 may also be used by other Senior High School Teachers in their respective classes to assess potential problems in its utilization and to further validate its effectiveness.
4. Further scrutiny and review may also be done by experts to review the concepts and principles integrated into the instructional material.
5. The developed electronic Learning instruction can served as a prototype in developing workbooks in other core courses in senior high school.
6. A follow-up study may also be conducted in the future to ascertain the congruence of the activities in the learning instruction to the competencies required in Cookery 11.

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