

## MELCS INTEGRATED LEARNING GUIDE AND THE RESEARCH WRITING PROFICIENCY AMONG SENIOR HIGH SCHOOL STUDENTS

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### ABSTRACT

This study attempted to evaluate the effectiveness of MELCs integrated learning guide in research writing and assess the research writing proficiency among the senior high school students. Specifically, it sought to determine if there would be significant difference in the pre-test and post-test scores of the respondents after utilizing learning guide to help assess their research writing proficiency. Likewise, it also sought to determine if there is a significant relationship between the respondents' perception of the MELCs integrated learning guide and their research writing proficiency. This study employed the developmental-experimental method of research in gathering necessary data. Moreover, fifty (50) Grade 11 students were the chosen respondents. The study used mean, standard deviation, frequency, percentages, paired t-test and Pearson product-moment correlation as statistical treatments. The result showed that there is significant difference in the pre-test and post-test scores of the respondents, making the null hypothesis be rejected. Additionally, the respondents' perception of the MELCs integrated learning guide is not significantly correlated to their research writing proficiency. Thus, the second null hypothesis is sustained. Since it was found out that integrated learning guide in teaching research writing is significantly effective, it is therefore recommended that teachers may also develop an integrated learning guide in various learning areas. Furthermore, future researchers with the same interest may continue this study in other disciplines. In addition, the school administrators and teachers may conduct in-depth training on the development of MELCs integrated learning guide in various subjects to enhance the needed skills by the students.

**Keywords** – MELCs integrated learning guide, research writing proficiency.

### 1.0 INTRODUCTION

The Philippine Department of Education affirms its dedication to continuing to provide high-quality, easily available, timely, and liberating Philippine basic education services that are based on the Sulong Edukalidad framework. It will continue to make an effort to create Filipino students who are holistic and have 21st century skills (Llego, 2022). And in order to solve the challenges in today's education, the Bureau of Curriculum Development makes sure that learning standards are current and adaptable. For this purpose, the Most Essential Learning Competencies were introduced by the Department of Education. MELCS are those that are deemed indispensable by students in the teaching-learning process for developing the abilities

necessary to prepare students for higher grade levels and, ultimately, for lifelong learning. (Llego, 2022).

Withal, success of these MELCs will only be achieved through providing classroom assessments. As stated in DepEd Order (DO) no. 8, s. 2015, also known as the Policy Guidelines in Classroom Assessment for the K–12 Basic Education Program, assessment should be utilized to guide and enhance teaching strategies and advance learning objectives. Therefore, educators must adopt alternative teaching strategies which can provide an optimal learning experience to the learners. Integrative teaching and learning could be one of the approaches that educators need to make their goal a reality.

Integrative learning as defined by Mansilla (2008) is based on the idea that students take charge of their education and develop into critical inquirers capable of making meaningful connections across disciplines and applying critical thinking to real-world situations. Meanwhile, according to the Association of American Colleges & Universities (2007), the most significant advancement in university education for the twenty-first century, is integrative learning.

Moreover, integrated teaching method incorporates many disciplines into a single session. The notion proposes that students get the most learning by gaining information and abilities in several areas simultaneously. For instance, students may combine language arts and arts by studying renowned painters and then writing a report, or math and physical education by playing basketball while assigning various shots to equal point values. There are many opportunities for integrated teaching Bentley (2015). These opportunities are both for the benefits of the learners and teachers. For the learners, it will lessen their workload in accomplishing task in all the learning areas. For the teachers, a collaboration among co-teachers will be established by integrating their learning areas in a single task.

Furthermore, integrative teaching and learning approach could be used in the senior high school curriculum specifically in the grade 11 where learners are exposed to numerous learning areas that should be taken in a semester including the research as one of the applied subjects. Each learning area comprises learning competencies that can be learned simultaneously.

In addition, by means of MELCs integration a teacher could craft an effective learning guide across learning areas which could help the learners master various areas in a single lesson or discussion.

Thus, the purpose of this study was to examine the efficacy of a MELCs integrated learning guide in research writing and gauge the students' level of research writing proficiency. Since this will be important in fulfilling the Department's objective of maintaining a high-quality, easily accessible and liberating Philippine basic education to create holistic Filipino learners with 21st century capabilities.

## 2.0 OBJECTIVES OF THE STUDY

This study aimed to evaluate the effectiveness of the MELCs Integrated Learning Guide in Research Writing and assess the research writing proficiency among senior high school students. Specifically its objectives are: to know the pre-test scores and post-test scores of the respondents in research writing proficiency in terms of: understanding the nature of

quantitative research; research title construction; writing a well-framed and compelling research paper; and determining the unique features and requirements in composing a research paper, to determine if there is significant difference between the pre-test and post-test scores, to know the perception of the respondents to the MELCs integrated learning guide in research writing in terms of: responsiveness; appeal to learners; congruency with MELCs; and helpfulness / practicability and lastly to know if there is significant relationship between the respondent's perception to the MELCs integrated learning guide in research writing and their research writing proficiency.

### **3.0 METHODOLOGY**

#### **3.1 Research Design**

This research employed the developmental-experimental approach of research in gathering necessary data. The descriptive method of research was also used to know the perception of the respondents on the effectiveness of MELCs integrated learning guide and the research writing proficiency among senior high school students.

#### **3.2 Respondents of the Study and the Sampling Technique**

The study's respondents are the fifty (50) Grade 11 students of Rosario Quesada Memorial National High School. They were enrolled during the S.Y. 2022-2023. The respondents were chosen purposively since Grade 11 curriculum offers practical research subject. They were the ones who utilized the developed learning guide, answer the evaluation tool and assessed by answering the pre-test and post-test prepared by the researcher.

#### **3.3 Research Instrument**

The instrument of this study is an evaluation tool which composed of the different criteria such as responsiveness, appeal to learners, congruency, helpfulness and practicability, in assessing the effectiveness of MELCs integrated learning guide and a 10-item pre-test and post-test with table of specification in each lesson in the learning guide to assess the students research writing proficiency after using the developed learning guide.

For the purpose of this research, two instruments are designed which were used by all of the identified respondents.

#### **3.4 Research Procedure**

Following the developmental-experimental research design the following steps were conducted as part of the data gathering procedure.

First, the researcher crafted a learning guide in research writing covering the most essential learning competencies from various learning areas of grade 11 such as practical research 1&2, statistics and probability, reading and writing skills, English for academic and special purposes, and empowerment technology which are part of the grade 11 curriculum. This learning guide is entitled MELCs Integrated Learning Guide in Research Writing. The most essential learning competencies used in the said learning guide are practically related to one another. In relevance

to the senior high school curriculum, specifically in grade 11, research writing is considered as one of the most challenging subjects. Due to this, a lot of time and effort are spent mastering the skills needed to learn this subject. Thus, other competencies might be neglected. With these concepts, MELCs Integrated Learning Guide was conceptualized. The researcher grouped the most essential learning competencies from various subjects in grade 11 that are related to one another and can be applied in research writing. Moreover, to assess the effectiveness of the learning guide, an assessment survey and a research writing proficiency test were constructed. These instruments will be submitted to the researcher's paper adviser and other experts for a comprehensive analysis and evaluation to make sure of their validity.

After further instruments' validation, the researcher secured the necessary permits and letters before conducting the study. A letter of approval was requested for the researcher to conduct the study. Upon approval, the letter of request or permission was presented to the head of the school where the study was conducted.

After securing the approval of the request or permission of the school head, an orientation with the identified respondents was conducted to inform them about the research purpose. Then, the learning guide was handed out to the 50 senior high school students in grade 11. The respondents utilized the integrated learning guide in their subject practical research 2. The learning guide contains of four (4) lessons, covering the whole quarter 3 learning competencies in practical research 2 and other integrated learning competencies from various learning areas. Each lesson of the learning guide has a pre-test at the beginning of the lesson and post-test at the end which the respondents have answered within the timeframe the learning guide was utilized. Likewise, an evaluation tool/survey will also be given to the respondents for them to assess the MELCs integrated learning guide's responsiveness, appeal to learners, and congruency with MELCs, helpfulness, and practicability.

Lastly, after a total of 8 weeks of data collection, the researcher tabulated the results of the evaluation survey and research writing proficiency test and submitted the data matrix to the statistician. The statistician checked the results before introducing them to the Statistical Center. After a week, the researcher received a confirmation message using the LSPU account containing the results of the data gathered and proceeded with the interpretation through the assistance of the statistician.

### **3.5 Statistical Treatment of Data**

This study utilized two statistical treatments, to measure the significant difference between the post-test and pre-test, paired T-test was used, while to measure if there is significant relationship between the respondent's perception to the MELCs integrated learning guide in research writing and the research writing proficiency among senior high school students, mean and standard deviation were applied.

## **4.0 RESULTS AND DISCUSSION**

This chapter includes the findings of the study with corresponding interpretations. The data are analyzed and interpreted so that the conclusions and recommendations can be drawn from the study.

**Table 1. Distribution of the Respondents in terms of the Pre-test Scores in Lesson 1**

Score	Frequency	Percent	Interpretation
1.00	1	2.0	Beginner
2.00	2	4.0	Beginner
3.00	15	30.0	Beginner
4.00	14	28.0	Intermediate
5.00	8	16.0	Intermediate
6.00	9	18.0	Intermediate
7.00	1	2.0	Advance
Total	50	100.0	

*Legend: 7-10 – Advanced; 4-6 – Intermediate; 0-3 – Beginner*

Table 1 presents the pre-test scores of the respondents in lesson 1 with the topic understanding the nature of quantitative research. It shows that out of 50 respondents 18 or 36% belong to the beginner level. While 31 or 62% are intermediate and 1 or only 2% fall under advanced level.

These clearly illustrate that, most of the respondents got low scores in understanding the nature of quantitative research as they range at the beginner and intermediate level only. The results imply that the students are lacking in understanding about quantitative research. Moreover, based on the grade 11 curriculum, the most essential learning competencies in practical research during the first semester focus only on qualitative research. Thus, the respondents only have limited knowledge on quantitative research.

**Table 2. Distribution of the Respondents in terms of the Pre-test Scores in Lesson 2**

Score	Frequency	Percent	Interpretation
.00	2	4.0	Beginner
1.00	5	10.0	Beginner
2.00	6	12.0	Beginner
3.00	9	18.0	Beginner
4.00	11	22.0	Intermediate
5.00	11	22.0	Intermediate
6.00	6	12.0	Intermediate
Total	50	100.0	

*Legend: 7-10 – Advanced; 4-6 – Intermediate; 0-3 – Beginner*

Table 2 presents the pre-test scores of the respondents in lesson 2 with the topic research title construction. It can be gleaned from the result that 22 or 44% of the respondents are under the beginner level. While 28 or 56% are at the intermediate level. On the other hand, none, or 0%, is at the advanced level. The data revealed that all the respondents got low scores in research title construction as they range at the beginner and intermediate level only. Although, research title construction is already taught during the first semester in practical research 1, it can be concluded there is still lack of mastery of the learning competency in the said topic. Hence, the results imply that retention of previous knowledge must be considered.

According to Hallmark Public School (2020) the goal of integrated learning is to improve knowledge, retention, and application of general concepts. Thus, if integrated learning is applied there will be higher retention of concepts. Which is one of the aims why this study

proposed the use of the MELCs integrated learning guide to further improve mastery of a certain concept.

**Table 3. Distribution of the Respondents in terms of the Pre-test Scores in Lesson 3**

Score	Frequency	Percent	Interpretation
1.00	2	4.0	Beginner
2.00	6	12.0	Beginner
3.00	9	18.0	Beginner
4.00	12	24.0	Intermediate
5.00	12	24.0	Intermediate
6.00	9	18.0	Intermediate
Total	50	100.0	

*Legend: 7-10 – Advanced; 4-6 – Intermediate; 0-3 – Beginner*

Table 3 presents the pre-test scores of the respondents in lesson 3 with the topic writing a well-framed and compelling research paper. The result shows that 17 or 34% of the respondents are under the beginner level while the remaining 66% or 33 of the respondents are in the intermediate level and none fall under the advanced level. Thus, data suggests that all the respondents got low scores in writing a well-framed and compelling research paper as they range at the beginner and intermediate level only. The results imply the need to further enhance the research writing proficiency of the students in terms of recognizing the different sections of a research paper. Furthermore, retention is still the major issue in this part, whereas parts of research were already given attention in practical research 1 the respondents were still unable to master the needed learning content. Hence, utilization of integrated learning guide is a great option to improve the necessary skills.

**Table 4. Distribution of the Respondents in terms of the Pre-test Scores in Lesson 4**

Score	Frequency	Percent	Interpretation
1.00	2	4.0	Beginner
2.00	9	18.0	Beginner
3.00	5	10.0	Beginner
4.00	9	18.0	Intermediate
5.00	14	28.0	Intermediate
6.00	9	18.0	Intermediate
7.00	2	4.0	Advanced
Total	50	100.0	

*Legend: 7-10 – Advanced; 4-6 – Intermediate; 0-3 – Beginner*

Table 4 presents the pre-test scores of the respondents in lesson 4 with the topic determining the unique features and requirements in composing a research paper. Based on the provided data 16 or 32% of the respondents are at the beginner level, 32 or 64% are at the intermediate level and only 2 or 4% are at the advanced level. Accordingly, most of the students got low scores as most of them fall under the beginner level and intermediate level. Therefore, the results imply the difficulty encountered by the students in determining the unique features and requirements in composing a research paper, specifically in terms of the use of proper language,

various techniques in summarizing variety of academic text that are vital in the completion of a research paper, observing coherence and cohesion, writing references, and formatting the paper. In addition, integration of other learning areas which discusses the mentioned topic must be given consideration, which is applied in the MELCS integrated learning guide utilized in the study.

**Table 5. Distribution of the Respondents in terms of the Post-test Scores in Lesson 1**

Score	Frequency	Percent	Interpretation
5.00	1	2.0	Intermediate
6.00	6	12.0	Intermediate
7.00	4	8.0	Advanced
8.00	11	22.0	Advanced
9.00	15	30.0	Advanced
10.00	13	26.0	Advanced
Total	50	100.0	

*Legend: 7-10 – Advanced; 4-6 – Intermediate; 0-3 – Beginner*

The table shows the post-test scores of the respondents in lesson 1. As presented in the given data out of 50 respondents 7 or 14% are at the intermediate level while 43 or 86% are at the advanced level and there is no recorded number of respondents under the beginner level. The scores obtained were ten (10) as the highest while five (5) as the lowest.

These evidently support the idea that the MELCs integrated learning guide helped improve the research writing proficiency of the respondents as most of them fall under the advanced level only few are under intermediate, and none is under the beginner level as compared to the pre-test were mostly beginner and intermediate and only one (1) is advanced.

**Table 6. Distribution of the Respondents in terms of the Post-test Scores in Lesson 2**

Score	Frequency	Percent	Interpretation
6.00	11	22.0	Intermediate
7.00	9	18.0	Advanced
8.00	14	28.0	Advanced
9.00	7	14.0	Advanced
10.00	9	18.0	Advanced
Total	50	100.0	

*Legend: 7-10 – Advanced; 4-6 – Intermediate; 0-3 – Beginner*

The table above shows the post-test scores of the respondents in lesson 2. The following data are obtained, 11 or 22% belongs to intermediate level while the rest of the respondents or the 39 or 78% are considered as at the advanced level. The scores obtained were ten (10) as the highest and six (6) as the lowest. The research writing proficiency was also recorded enhanced during the post-test in lesson 2, it is supported since most of the respondents are considered as at the advanced level.

**Table 7. Distribution of the Respondents in terms of the Post-test Scores in Lesson 3**

Score	Frequency	Percent	Interpretation
6.00	14	28.0	Intermediate
7.00	14	28.0	Advanced
8.00	14	28.0	Advanced
9.00	4	8.0	Advanced
10.00	4	8.0	Advanced
Total	50	100.0	

*Legend: 7-10 – Advanced; 4-6 – Intermediate; 0-3 – Beginner*

The table displayed the post-test scores of the respondents in lesson 3. As shown in the data provided, 14 or 28% are at the intermediate level and 36 or 72% are at the advanced level. The scores obtained were ten (10) as the highest and six (6) as the lowest.

This clearly exposed the effectiveness of the MELCs integrated learning guide in research writing utilized by the respondents as an improvement in the obtained scores is noted. Most of the respondents are recorded to be under the advanced level and only a few are intermediate, and none are beginner.

**Table 8. Distribution of the Respondents in terms of the Post-test Scores in Lesson 4**

Score	Frequency	Percent	Interpretation
6.00	8	16.0	Intermediate
7.00	10	20.0	Advanced
8.00	9	18.0	Advanced
9.00	4	8.0	Advanced
10.00	19	38.0	Advanced
Total	50	100.0	

*Legend: 7-10 – Advanced; 4-6 – Intermediate; 0-3 – Beginner*

The table shows the post-test scores of the respondents in lesson 4. As supported by the data gathered 42 or 84% of the respondents are already at the advanced level while the remaining 8 or 16% are at the intermediate level. The scores obtained were ten (10) as the highest and six (6) as the lowest.

As the data suggests the scores of the respondents from pre-test to post-test were improved. Consequently, most of the respondents are considered to be under the advance level, few are intermediate, and none is beginner.

As an overall results from the conducted post-test, it is found out that integrated approach applied in the learning guide is significantly effective among the four lessons. Yimwilai (2015) claimed that integrated approach is more effective than the conventional method, it was proved in his study focuses on the critical thinking skills of the students, wherein there are two groups the experimental and control group. At the beginning, the experimental group was significantly

having a lower critical thinking skills than those of the control group; however, after the experiment using integrated approach their critical thinking skills became significantly higher.

**Table 9. Test of Difference between the Pre-test and Post-test Scores of the Respondents**

	Pre-test		Post test		T	df	Sig. (2-tailed)	Interpretation
	Mean	SD	mean	SD				
Lesson 1	4.14	1.31	8.44	1.39	20.247	49	0.000	Significant
Lesson 2	3.58	1.67	7.88	1.39	23.154	49	0.000	Significant
Lesson3	4.06	1.42	7.40	1.21	12.214	49	0.000	Significant
Lesson 4	4.18	1.60	8.32	1.54	12.708	49	0.000	Significant

Table 9 displays the test of difference between the pre-test and post-test scores of the respondents among the four lessons. As shown in the result, there is significant difference between the pre-test and post-test scores of the respondents in all the lessons with p-value of 0.000 at 0.05 level of significance after utilizing the MELCs integrated learning guide in research writing.

Bentley (2015) explicated that in integrated teaching method students get the most learning by gaining information and abilities in several areas simultaneously. Likewise, Gibbs (2018) stressed that students benefit from an integrated learning strategy because it offers broad structuring principles and concepts that help them build bigger picture of content.

In addition, Dimalanta (2016) supported the claim as he believed that integrated method allows students to improve their learning, and this is done by connecting learning information across and within academic areas. Moreover, He emphasized that when students can connect what they are learning in one subject area to comparable knowledge in another then, they are integrating. Which was done by the students in after the utilization of the MELCs integrated learning guide in research writing.

**Table 10. Respondent’s Perception to the MELCs Integrated Learning Guide in Research Writing in terms of Responsiveness**

Indicators	Mean	Std. Deviation	Verbal Interpretation
1. provides self-directed activities.	3.58	0.50	Strongly Agree
2. has an adequate discussion of the content.	3.66	0.52	Strongly Agree
3. offers a range of my interests and preferences.	3.76	0.43	Strongly Agree
4. is sufficient and allows me to learn independently.	3.78	0.42	Strongly Agree
5. assists me to understand the topics clearly and easily.	3.66	0.48	Strongly Agree
6. gives me time to reflect on the things I’ve learned.	3.50	0.51	Strongly Agree
7. caters to self-assessment to evaluate my learning.	3.68	0.47	Strongly Agree
8. focuses on the product and the process of my learning.	3.72	0.45	Strongly Agree
9. is divided into a series of phases towards the achievement of learning (from the checking of background knowledge to application).	3.68	0.47	Strongly Agree
10. consists of content that helps me understand the task to be done as a requirement for each most essential learning competency.	3.80	0.40	Strongly Agree
<b>Overall</b>	<b>3.68</b>	<b>0.21</b>	<b>Strongly Agree</b>

Legend: 3.00-4.00 – Strongly Agree; 2.00-2.99 – Agree; 1.00-1.99 – Disagree; 0.99-1.00 – Strongly Disagree

Table 10 presents the respondent's perception to the MELCs Integrated Learning Guide in Research Writing in terms of responsiveness. The result shows that the overall weighted mean is 3.68 and a standard deviation of 0.21 which interpreted as "Strongly Agree". Specifically, the lowest weighted mean is 3.58 with standard deviation of 0.50 which refers to indicator number 1 which says provides self-directed activities, while the highest weighted mean is 3.80 with standard deviation of 0.40, which refers to indicator number 10 which says consists of content that helps me understand the task to be done as a requirement for each most essential learning competency.

It is realized that based on the presented result the respondents found the MELCs integrated learning guide in research writing as a beneficial material for it conform to their needs and it provide the needed requirements to master the lesson content.

**Table 11. Respondent's Perception to the MELCs Integrated Learning Guide in Research Writing in terms of Appeal to Learners**

Indicators	Mean	Std. Deviation	Verbal Interpretation
<i>The learning guide...</i>			
1. instructions are easy to follow.	3.84	0.37	Strongly Agree
2. enables me to evaluate my learning outcomes.	3.58	0.50	Strongly Agree
3. has a variety of activities that I can choose from.	3.44	0.50	Strongly Agree
4. presents a clearer picture of the skills I have to master.	3.64	0.53	Strongly Agree
5. accompanies me with clear and specific directions for their use.	3.60	0.53	Strongly Agree
6. offers appropriate motivation so I am more engaged to learn.	3.70	0.46	Strongly Agree
7. ensures my participation by providing interesting activities.	3.74	0.49	Strongly Agree
8. utilizes the art of questioning to develop my higher level of thinking.	3.64	0.48	Strongly Agree
9. helps me diagnose my need to master a certain competency.	3.52	0.54	Strongly Agree
10. enables me to create personal objectives to better comprehend the concept offered.	3.64	0.53	Strongly Agree
<b>Overall</b>	<b>3.63</b>	<b>0.24</b>	<b>Strongly Agree</b>

*Legend: 3.00-4.00 – Strongly Agree; 2.00-2.99 – Agree; 1.00-1.99 – Disagree; 0.99-1.00 – Strongly Disagree*

Table 11 displays the respondents' perception to the MELCs Integrated Learning Guide in Research Writing in terms of appeal to learners. The result shows that the overall weighted mean is 3.63 and a standard deviation of 0.24 which interpreted as "Strongly Agree". Specifically, the lowest weighted mean is 3.44 with standard deviation of 0.50 which refers to indicator number 3 which says has a variety of activities that I can choose from, while the highest weighted mean is 3.84 with standard deviation of 0.37 which refers to indicator number 1 which says instructions are easy to follow.

Based on the provided data one can learn that the respondents found the MELCs integrated learning guide in research writing as an engaging one, where they can explore their skills and abilities. Adeyami (2010) supported this claim as he explained that integrated method offers pupils more complete, rich, and exciting learning. Hence, it creates a more engaging and thought-provoking educational environment while learning.

**Table 12. Respondent's Perception to the MELCs Integrated Learning Guide in Research Writing in terms of Congruency with MELCS**

Indicators	Mean	Std. Deviation	Verbal Interpretation
<i>The learning guide...</i>			
1. contains the expected learning competencies for each lesson.	3.68	0.47	Strongly Agree
2. has test items that cover the important competencies to be developed.	3.66	0.48	Strongly Agree
3. supplements activities that are measurable based on the competencies.	3.76	0.48	Strongly Agree
4. has objectives that cater to the goals of various subject areas in grade 11.	3.80	0.40	Strongly Agree
5. uses instructional materials that are aligned across subject areas' competencies.	3.68	0.47	Strongly Agree
6. contains the most essential learning competencies that are practically related to each other.	3.82	0.39	Strongly Agree
7. comprises the most essential learning competencies from various subjects in grade 11.	3.76	0.43	Strongly Agree
8. has items in the provided assessments which are congruent to the specific objectives.	3.68	0.47	Strongly Agree
9. has specific objectives which are attainable relative to the aim of the most essential learning competencies	3.58	0.50	Strongly Agree
10. supplies activities that are congruent to the most essential learning competencies across subject areas in grade 11.	3.68	0.47	Strongly Agree
<b>Overall</b>	<b>3.71</b>	<b>0.22</b>	<b>Strongly Agree</b>

Legend: 3.00-4.00 – Strongly Agree; 2.00-2.99 – Agree; 1.00-1.99 – Disagree; 0.99-1.00 – Strongly Disagree

Table 12 displays the respondents' perception to the MELCs Integrated Learning Guide in Research Writing in terms of congruency with MELCs. The result shows that the overall weighted mean is 3.71 and a standard deviation of 0.22 which interpreted as "Strongly Agree". Specifically, the lowest mean is 3.58 with standard deviation of 0.50 which refers to indicator number 9 which says has specific objectives which are attainable relative to the aim of the most essential learning competencies, while the highest mean is 3.82 with standard deviation of 0.39 which refers to indicator number 6 which says contains the most essential learning competencies that are practically related to each other.

The gathered result clearly states that the respondents found the MELCs integrated learning guide has practically related learning competencies aligned in the curriculum of grade 11 as they can also encounter such competencies in other learning areas. In the study of Okoro (2016), the thematic approach, proposed by Freire (1981), suggests that the way of teaching and learning where many areas of the curriculum are connected together and integrated within a theme thematic approach to instruction is a powerful tool for integrating the curriculum and eliminating isolated and reductionist nature of teaching and it allows learning to more natural than then fragmented nature of school activities.

**Table 13. Respondent's Perception to the MELCs Integrated Learning Guide in Research Writing in terms of Helpfulness/Practicability**

Indicators	Mean	Std. Deviation	Verbal Interpretation
<i>The learning guide...</i>			
1. helps me track my learning.	3.86	0.35	Strongly Agree
2. ideas and concepts are well-explained.	3.56	0.50	Strongly Agree
3. permits me to reflect on my learning.	3.68	0.51	Strongly Agree
4. grants me sufficient time before proceeding to the next topic.	3.44	0.61	Strongly Agree
5. has provision for a pretest, self-assessment, and post-test in each lesson.	3.82	0.39	Strongly Agree
6. allows me to return to the lesson's content for review.	3.78	0.42	Strongly Agree
7. improves my performance in doing practical work across subject areas.	3.72	0.45	Strongly Agree
8. provides me with an understanding of the practical lessons across subject areas.	3.66	0.48	Strongly Agree
9. makes a positive contribution to heightening and sustaining my motivation to learn.	3.44	0.50	Strongly Agree
10. contributes to the acquisition of concepts and understanding of physical activities, knowledge, wellness, and skills.	3.74	0.44	Strongly Agree
<b>Overall</b>	<b>3.67</b>	<b>0.25</b>	<b>Strongly Agree</b>

Legend: 3.00-4.00 – Strongly Agree; 2.00-2.99 – Agree; 1.00-1.99 – Disagree; 0.99-1.00 – Strongly Disagree

Table 13 displays the respondents' perception to the MELCs Integrated Learning Guide in Research Writing in terms of Helpfulness/Practicability. The result shows that the overall weighted mean is 3.67 and a standard deviation of 0.25 which interpreted as "Strongly Agree". Specifically, the lowest mean is 3.44 with standard deviation of 0.61 which refers to indicator number 4 which says grants me sufficient time before proceeding to the next topic, while the highest mean is 3.86 with standard deviation of 0.35 which refers to indicator number 1 which says helps me track my learning.

Based on the presented result is it evident that the respondents found the MELCs integrated learning guide in research writing as a helpful tool for them to improve the research writing proficiency. Thus, integrated approach appealed to be advantageous to students. Lucan (1981) in Langa and Yost (2007) suggests that the integrated approach is student-centered because it empowers students to make connections, generalize, and transfer knowledge to a variety of problem-solving situations. It is supported by Adeyemi (2010) when he stated that integrated approach provides students with more comprehensive learning.

Further, Knowles and Smith (2001) explained that integrated approach can help student become independent problem solvers.

**Table 14. Test of Relationship between the Respondent's Perception to the MELCs Integrated Learning Guide and to their Research Writing Proficiency**

	Responsiveness	Appeal to Learners	Congruence with MELCS	Helpfulness/Practicability
Lesson 1 Post-test	-0.112	-0.107	-0.088	-0.120
Lesson 2 Post-test	-.376**	-0.262	-0.082	0.013
Lesson 3 Post-test	0.109	0.134	0.046	0.195
Lesson 4 Post-test	0.012	-0.019	-0.087	-0.049

**\*\*.** Correlation is significant at the 0.01 level(2tailed).

Table 14 displays the test of relationship between the respondent's perception to the MELCs integrated learning guide and to their research writing proficiency. Based on the gathered result it was found out that the MELCs integrated learning guide lesson number 2 has significant relationship with the research writing proficiency of the respondents in terms of responsiveness the Pearson R-value of -.376 at 0.01 level of significance which means there is negative correlation. A negative correlation is a relationship between two variables in which one variable increases as the other decreases or vice versa. In this case, the change in the state of the test scores in assessing the research writing proficiency and the perception of the respondents towards the learning guide went opposite ways. On the other hand, there is no significant relationship in terms of appeal to learners, congruence with MELCs and helpfulness/practicability.

Moreover, there is also no significant relationship between the respondent's perception to the MELCs integrated learning guide lesson numbers 1,3, and 4 and their research writing proficiency in terms of responsiveness, appeal to learners, congruence with MELCs and helpfulness/practicability at 0.01 level of significance.

These only proved that the perception of the respondents towards the MELCs integrated learning guide does not have any connection with how the respondents learned or improved their research writing proficiency after utilizing the learning guide.

## 5.0 CONCLUSION AND RECOMMENDATION

Based on the findings of the study, these conclusions were drawn.

1. The pre-test and the post-test scores of the respondents has significant difference in terms of understanding the nature of quantitative research, research title construction, writing a well-framed and compelling research paper, and determining the unique features and requirements in composing a research paper. So, the hypothesis stating that there is no significant difference between the pre-test and post-test scores is not supported and therefore rejected.
2. The respondents' perception of the MELCs integrated learning guide is not significantly correlated to their research writing proficiency components. Thus, hypothesis number two (2) is sustained. However, the MELCs integrated learning guide lesson number 2 has a significant relationship with negative correlation with the research writing proficiency of the respondents in terms of responsiveness, considering that the null hypothesis is rejected on this part.

## 6.0 RECOMMENDATIONS

In light of the study's findings and conclusions, the following recommendations are hereby presented.

1. Since the study provided evidence that using an integrated learning guide in teaching research writing is significantly effective to develop the research writing proficiency skill, it is therefore recommended that teachers may also develop an integrated learning guide in teaching various learning areas intended to develop necessary skills, especially those skills where the learners are having difficulty with.
2. This study only focused on the research writing proficiency of the respondents in writing chapters 1 to 3, so future researchers with the same interest may continue this study assessing the research writing proficiency of the senior high school students using MELCs integrated learning guide up to chapter 5 or they may apply it also in other disciplines.
3. School administrators and teachers may conduct in-depth training on the development of MELCs integrated learning guide in various learning areas to enhance the needed skills by the students.

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