

Students' Engagement and Competency in Conducting School-Based Research Through a Teacher's Made Guide in Writing Research

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Abstract—The study sought to determine the acceptability of content and features of Teacher's Made Guide, the level of engagement and research competence of senior high school students as they conduct their research. The study also aimed to determine the significant relation of the Teacher's Made Guide to the students' engagement and Students' competence. This study utilized descriptive research design. The respondents of the study are Grade 11 students who are currently taking the subject of Practical Research 1 that is composed of (43) respondents. The study was conducted at Callejon National High School Senior High School in San Antonio, Quezon, during the Second semester first quarter of the school year 2024-2025. The researcher made a self-made survey questionnaire to determine the level of acceptability of Teacher's Made Guide and the engagement and research competence of the students upon the use of the material and validated by experts. The statistical treatment that was utilized in the study was weighted mean and standard deviation. The components of Teacher's Made Guide are highly acceptable as a guide for the students in writing research. As to the level of acceptability on the features of Teacher's Made Guide, all of the features received very high acceptability with the user-friendliness of the material as the highest mean score. There is a very high acceptability on the students' engagement of the students in using Teacher's Made Guide. The research competence of students in using Teacher's Made Guide received very high acceptability. The correlation coefficients also shows that the relationships between the level of acceptability of Teacher's Made Guide and the students' engagement are statistically significant. The relationships between Teacher's Made Guide and research competence of the students are statistically significant. There is no significant relationship between Teacher's Made Guide and the student's engagement, as well as between Teacher's Made Guide and the research competence of students. The null hypotheses are accepted. It may be suggested that Teacher's Made Guide may be utilized as a guide for students, teachers, administrators, and future researchers.

Keywords— Students' engagement, students' competency, features, components, Teacher's Made Guide.

I. INTRODUCTION

School-based Research has been part of the requirements and final output in the research related subjects of senior high school, under K12 curriculum. It motivates students to engage in exploring the issues and problem in the school and society which concerns variety of sectors in their local places and or the Philippines.

According to Bucar (2019), in order to acknowledge the significance of research in developing critical thinking skills, the Department of Education integrated research subjects into

the current curriculum in the Philippines. These include Practical Research I which focuses on the Qualitative Research, Practical Research 2 that teaches the quantitative research, and Inquiries, Investigations, and Immersion, which tackles the experiences of students in conducting research.

Relatively, having the courses which are related to research in senior high school, it is vital to possess certain level of skills in this academic endeavor which will help an individual to take part in the initiative of any institution to create knowledge and contribute significantly in the progress of the nation, by conducting research (Sismondo, 2020). And so, Research competence has been the subject of skills that is being developed to the senior high school students.

Research competence is the ability of the students to conduct research independently that develops professional and methodological competence and other professional, cultural, and general competencies (Gorshkova, 2017). It encompasses the holistic set of skills and knowledge that enable individual to effectively and actively participate the entire research process starting from formulating questions and hypotheses to analyzing data and drawing of conclusions.

This study aimed to enhance the research competence of the senior high school students in conducting school-based research by implementing Teacher's Made Guide and determining its acceptability and the students' perception towards it.

1.1 Statement of the Problem

Problem/s which were addressed by the research

The study aimed to determine the students' engagement and competency in conducting school-based research through a teacher's made guide in writing research at Callejon National High School, in the school year 2024-2025

Specifically, it sought to answer the following questions:

1. What is the level of acceptability of Teacher's Made Guide as perceived by the respondents on the components with regards to:
 - 1.1 Objectives;
 - 1.2 Content;
 - 1.3 Activity; and
 - 1.4 Assessment?
2. What is the level of acceptability of Teacher's Made Guide in terms of on the features as perceived by the respondents with regards to:
 - 2.1 Clarity;

- 2.2 Usability; and
- 2.3 User Friendliness?
- 3. What is the level of students' engagement in in terms of:
 - 3.1 Active Participation;
 - 3.2 Collaboration Project; and
 - 3.3 Active Experimentation?
- 4. What is the level of the students' competency in terms of:
 - 4.1 Research Literacy Skills;
 - 4.2 Writing Skills; and
 - 4.3 Critical Thinking Skills?
- 5. Is there a significant relationship between the utilization of Teacher's Made Guide and to the students' engagement?
- 6. Is there a significant relationship between the utilization of Teacher's Made Guide and to the students' competency?

II. METHODOLOGY

This study utilized descriptive research design. The respondents of the study are Grade 11 students who are currently taking the subject of Practical Research 1 that is composed of (43) respondents. The study was conducted at Callejon National High School Senior High School in San Antonio, Quezon, during the Second semester first quarter of the school year 2024-2025. The researcher made a self-made survey questionnaire to determine the level of acceptability of Teacher's Made Guide and the engagement and research competence of the students upon the use of the material and validated by experts. The statistical treatment that was utilized in the study was weighted mean and standard deviation.

III. RESULTS AND DISCUSSION

This part presented the different results and discussed the results from treating the data gathered in this study. All specific questions in Chapter 1 under the statement of the problem were answered in this chapter supported by tables. It presents the data gathered about the significant relationship between acceptability as perceived by the respondents on the components, features and students' engagement, competency in the utilization of Teachers' Made Guide. In particular, the study sought to address the following:

Level of acceptability as perceived by the respondents on the components of Teacher's Made Guide
 In this study, the level of acceptability as perceived by the respondents on the components of Teachers' Made Guide refers to Objective, Content, Activity, and Assessment.

The following tables show the statement, mean, standard deviation. Remarks and verbal interpretation from the perspectives of respondents.

Table 1 presents the level of acceptability of the objectives of Teacher's Made Guide, with all indicators receiving a "Very High" verbal interpretation. The highest-rated statement, "inspire me to take an active role in conducting research" (M = 3.70, SD = 0.465), suggests that the project's objectives are highly motivational for students. Similarly, objectives related to clarity (M = 3.56, SD = 0.629) and relevance to academic development (M = 3.60, SD = 0.623) indicate strong alignment with students' learning needs. Although all indicators were rated "Very High," the lowest mean score (M = 3.30) was observed in objectives related to

alignment with expected outcomes and comprehensibility, suggesting slight room for improvement in these areas. Overall, the mean extent of acceptability (M = 3.47) confirms that the objectives of Teacher's Made Guide are well-received and deemed beneficial for students' academic and research development.

TABLE 1. Level of acceptability as perceived by the respondents on the components of Teacher's Made Guide in terms of Objective

| I can definitely state that the Objectives of Teacher's Made Guide.... | Mean | D | Remarks |
|--|-------------------|------|----------------|
| 1. are clear and comprehensible. | 3.56 | 0.63 | Strongly Agree |
| 2. are align with the expected outcome. | 3.30 | 0.56 | Strongly Agree |
| 3. are realistic and achievable within the given timeframe. | 3.58 | 0.59 | Strongly Agree |
| 4. are relevant to my academic development. | 3.60 | 0.62 | Strongly Agree |
| 5. provide the purpose of Teacher's Made Guide. | 3.49 | 0.59 | Strongly Agree |
| 6. encourage critical thinking and reflection. | 3.44 | 0.67 | Strongly Agree |
| 7. is comprehensible enough for me. | 3.30 | 0.71 | Strongly Agree |
| 8. help to enhance my learning experience in research. | 3.37 | 0.66 | Strongly Agree |
| 9. are meaningful and connected to real-world applications. | 3.35 | 0.78 | Strongly Agree |
| 10. inspire me to take an active role in conducting research. | 3.70 | 0.46 | Strongly Agree |
| Weighted Mean | 3.47 | | |
| SD | 0.64 | | |
| Verbal Interpretation | Highly Acceptable | | |

Based on the study Whitehorse (2025), every material states the route towards knowledge, attitudes, and skills students needed to acquire by the end of learning. It includes the precise skills that students should have acquired by the end of the class. These goals provide a framework for directing teachers and students in the learning process. It is by directly and clearly stating what are the students expected to achieve which will ensure the focus on acquiring specific competencies.

It gleams that the importance of clearly defined objectives in guiding students toward acquiring knowledge, skills, and attitudes. Well-structured objectives provide a framework for learning, ensuring that students focus on achieving specific competencies. The high acceptability of Teacher's Made Guide's objectives reinforces the0ir role in supporting academic and research development, ultimately benefiting both students and educators.

Table 2 illustrates the level of acceptability of Teacher's Made Guide in terms of content, with all indicators receiving a "Very Acceptable" verbal interpretation. The highest-rated indicator, "provides an informative and relevant content about research" (M = 3.67, SD = 0.522), highlights the effectiveness of the project in delivering essential research knowledge. Additionally, the logical structure and organization of the content (M = 3.65, SD = 0.529) contribute to its clarity and accessibility. While all aspects of content were highly rated, the lowest mean score (M = 3.26) was observed in "encourages me to explore additional topics on my own,"

indicating a potential area for enhancement to further promote independent learning. Overall, with a mean extent of acceptability of 3.43, the findings confirm that the content of Teacher’s Made Guide is well-structured, engaging, and supports students’ research learning effectively.

TABLE 2. Level of acceptability as perceived by the respondents on the components of Teacher’s Made Guide in terms of Content

| I can definitely state that Teacher’s Made Guide.... | Mean | SD | Remarks |
|--|-------------------|------|----------------|
| 1. provides an informative and relevant content about research. | 3.67 | 0.52 | Strongly Agree |
| 2. is easy to understand. | 3.37 | 0.54 | Strongly Agree |
| 3. supports my learning effectively in research comprehensive. | 3.35 | 0.65 | Strongly Agree |
| 4. is factually correct and free from errors. | 3.37 | 0.66 | Strongly Agree |
| 5. includes practical activities and real-world examples. | 3.47 | 0.70 | Strongly Agree |
| 6. is engaging and holds my interest. | 3.33 | 0.61 | Strongly Agree |
| 7. is age appropriate. | 3.42 | 0.66 | Strongly Agree |
| 8. is well-organized and structured logically for ease of understanding. | 3.65 | 0.53 | Strongly Agree |
| 9. encourages me to explore additional topics on my own. | 3.26 | 0.66 | Strongly Agree |
| 10. indicates tools or activities for assessment | 3.37 | 0.66 | Strongly Agree |
| Weighted Mean | 3.43 | | |
| SD | 0.63 | | |
| Verbal Interpretation | Highly Acceptable | | |

From the concept of Kolb’s Experiential Learning Theory, learning is effective when students engage in a concrete experience, reflective observation, abstract conceptualization, and active experimentation. Teacher’s Made Guide supports the first two stages by providing clear and relevant research information. However, the lower rating on independent exploration suggest that the material may benefit from incorporating active experimentation, such as research-based activities, hands-on exercises, and real-world applications.

Based on the study of Sweller (2015), modules or printed learning materials are required to be designed to minimize cognitive overload through the presentation of clear, structured, and engaging manner to enhancing the effectiveness. Including excessive details can overwhelm learners, and so content should be concise that focuses on the essential information aligns with the learning objectives (Sweller, 2015). Breaking down complex topics improves comprehension by allowing learners to process information.

This proposes the significant part of ensuring the structure and reliability of the content in every developed material. The logical structured and well-explained information that will be beneficial to the learning of the students upon using any printed learning material. The highly acceptability in the content of Teacher’s Made Guide surely address the needs of learners in the intervention guide of the learners in writing their research.

Table 3 below presents the level of acceptability of Teacher’s Made Guide in terms of activities, with all indicators receiving a "Very Acceptable" verbal interpretation.

The highest-rated indicator, "is enjoyable and engaging" (M = 3.67, SD = 0.522), suggests that students find the activities stimulating and interesting. Additionally, the activities promote higher-order thinking skills (M = 3.53, SD = 0.667) and are designed to be completed within a reasonable timeframe (M = 3.51, SD = 0.506), indicating their effectiveness in balancing challenge and manageability. While all indicators received positive ratings, the lowest mean scores (M = 3.30) were observed in "is well-structured and easy to follow" and "is relevant to the provided learning objectives," suggesting minor areas for refinement in clarity and alignment. With an overall mean extent of acceptability of 3.43, the findings affirm that the activities in Teacher’s Made Guide are engaging, well-designed, and effectively support students’ learning experiences.

TABLE 3. Level of acceptability as perceived by the respondents on the components of Teacher’s Made Guide in terms of Activity

| I can definitely that the activity in Teacher’s Made Guide.... | Mean | SD | Remarks |
|---|-------------------|------|----------------|
| 1. is enjoyable and engaging. | 3.67 | 0.52 | Strongly Agree |
| 2. directly aligned with the objectives. | 3.40 | 0.54 | Strongly Agree |
| 3. incorporate diverse format to cater different learning preference. | 3.40 | 0.54 | Strongly Agree |
| 4. is well-structured and easy to follow. | 3.30 | 0.64 | Strongly Agree |
| 5. promotes collaboration and inclusivity. | 3.42 | 0.63 | Strongly Agree |
| 6. is relevant to the provided learning objectives. | 3.30 | 0.60 | Strongly Agree |
| 7. promote higher order thinking skills. | 3.53 | 0.67 | Strongly Agree |
| 8. age appropriate, suitable for target learner. | 3.44 | 0.63 | Strongly Agree |
| 9. provides real-world context | 3.37 | 0.69 | Strongly Agree |
| 10. designed to be completed within reasonable time frame. | 3.51 | 0.51 | Strongly Agree |
| Weighted Mean | 3.43 | | |
| SD | 0.60 | | |
| Verbal Interpretation | Highly Acceptable | | |

In the study of Sanchez (2022), it is stated that presenting an interactive activity enables learners to enjoy the process of learning for it encourages them to deepen their understanding with the subject matter. Connections to the learners is vital especially when the goal of the material is to ensure the understanding and learning of the learners using the material. The study discussed that establishing connections with the students is important most especially when the primary objective of the material is to guide and facilitate comprehension and retention.

This shows how crucial the preparation of activities in alignment of its learning objectives and the content of a developed material. It considers the structure and clarity of the instructions for the better understanding of the learners. The high acceptability of the activities in Teacher’s Made Guide enables its role in supporting the learning process of learners in writing research.

Table 4, presents the level of acceptability of Teacher’s Made Guide in terms of assessment, with all indicators

receiving a "Very High" verbal interpretation. The highest-rated indicators, "are fair and unbiased" and "is accurately measuring acquired knowledge from the lesson" (M = 3.60, SD = 0.660 and 0.583, respectively), indicate that the assessments are perceived as equitable and effective in evaluating students' learning. Additionally, the clarity of assessment criteria, rubrics, and instructions (M = 3.56, SD = 0.590) contributes to transparency and understanding.

TABLE 4. Level of acceptability as perceived by the respondents on the components of Teacher's Made Guide in terms of Assessment

| I can definitely that the statement in Teacher's Made Guide.... | Mean | SD | Remarks |
|--|-------------------|------|----------------|
| 1. provides assessment criteria, rubrics, and instruction clearly. | 3.56 | 0.59 | Strongly Agree |
| 2. are fair and unbiased. | 3.60 | 0.66 | Strongly Agree |
| 3. are transparent and well-communicated. | 3.44 | 6.04 | Strongly Agree |
| 4. reflects the key objectives of the project. | 3.50 | 0.63 | Strongly Agree |
| 5. is balance of formative and summative. | 3.51 | 0.59 | Strongly Agree |
| 6. is valid and reliable | 3.56 | 0.59 | Strongly Agree |
| 7. encourages inclusivity for each kind of learner. | 3.53 | 0.50 | Strongly Agree |
| 8. is flexible for learners. | 3.53 | 0.63 | Strongly Agree |
| 9. is comprehensive for learners. | 3.51 | 0.59 | Strongly Agree |
| 10. is accurately measuring acquired knowledge from the lesson. | 3.60 | 0.58 | Strongly Agree |
| Weighted Mean | 3.55 | | |
| SD | 0.59 | | |
| Verbal Interpretation | Highly Acceptable | | |

While all indicators were rated very highly, slightly lower mean scores (M = 3.51) in areas such as "reflects the key objectives of the project" and "is comprehensive for learners" suggest minor opportunities for refinement in ensuring thorough alignment with learning goals. With an overall mean extent of acceptability of 3.55, the findings confirm that the assessment components of Teacher's Made Guide are well-structured, inclusive, and reliable in measuring students' learning outcomes

Based on the findings of the study conducted by Julaton (2022), which investigated the direct effect of self-learning modules on the academic performance of learners, it highlighted the importance of aligning the assessments with clearly define learning objectives in ensuring the successful completion of achievement of the intended outcome of the material. It emphasized the need for both formative and summative assessment in the evaluation of the students' learning.

It greatly supports that assessment has a big role in evaluating the outcome of the learners at the end of each lesson. The alignment of learning object to the content, activities, and assessment should be ensured, with the clarity of instructions in the activity and assessment. With the high acceptability of the assessment of Teacher's Made Guide, this will guide the learners in the process of their research writing journey.

Level of acceptability as perceived by the respondents on the features of Teacher's Made Guide

In this study, the level of acceptability as perceived by the respondents on the features of Teacher's Made Guide refers to Clarity, Usability, and User Friendliness.

The statement, mean, standard deviation, comments, and verbal interpretation from the respondent's viewpoint are presented in the tables below.

Table 5 shows the level of acceptability of Teacher's Made Guide in terms of clarity, with all indicators receiving a "Very High" verbal interpretation. The highest-rated indicator, "Follow a logical sequence in the structure and organization of content, activities, and assessment" (M = 3.70, SD = 0.465), suggests that the project is well-structured and systematically organized for ease of understanding. Additionally, the use of simple, clear, and concise language (M = 3.63, SD = 0.536) further enhances the clarity of the material. Instructions (M = 3.60, SD = 0.583) and role specifications (M = 3.60, SD = 0.541) were also highly rated, indicating that expectations for both students and teachers are well-defined. While all aspects of clarity were rated highly, the lowest mean scores (M = 3.47) were observed in "has the purpose in each activity which are clearly communicated," suggesting a minor area for improvement in explicitly conveying activity objectives. With an overall mean extent of acceptability of 3.56, the findings confirm that Teacher's Made Guide is effectively designed to present research concepts, instructions, and materials in a clear and organized manner.

TABLE 5. Level of acceptability as perceived by the respondents on the features of Teacher's Made Guide in terms of Clarity

| I can definitely state that Teacher's Made Guide.... | Mean | SD | Remarks |
|---|-------------------|------|----------------|
| 1. presents instructions that are clear and easy to follow. | 3.60 | 0.58 | Strongly Agree |
| 2. has the purpose in each activity which are clearly communicated. | 3.47 | 0.59 | Strongly Agree |
| 3. has steps in completing research which are explained in a straightforward. | 3.51 | 0.63 | Strongly Agree |
| 4. uses language that are simple, clear, concise, and appropriate. | 3.63 | 0.54 | Strongly Agree |
| 5. uses consistent terminologies that avoid confusion. | 3.49 | 0.51 | Strongly Agree |
| 6. discusses concept with a clear logical pattern. | 3.58 | 0.59 | Strongly Agree |
| 7. provide significant content for research. | 3.53 | 0.59 | Strongly Agree |
| 8. arrange learning material, resources and tools in coherent manner. | 3.49 | 0.55 | Strongly Agree |
| 9. clearly specify the roles of teachers, learners, and other stakeholder. | 3.60 | 0.54 | Strongly Agree |
| 10. follow a logical sequence in the structure and organization of content, activities, and assessment. | 3.70 | 0.46 | Strongly Agree |
| Weighted Mean | 3.56 | | |
| SD | 0.56 | | |
| Verbal Interpretation | Highly Acceptable | | |

As supported by the study of Bolkan (2015), which discussed that the impact of clarity on the students learning can be attributed to the ability of a developed learning material to minimize the extraneous cognitive load, which deals with the unnecessary mental effort required to process information.

The result of the study presented that if the instructional clarity is high, students can more easily comprehend and organize the material, thus reduce confusion and freeing up cognitive resources which allow them to have better comprehension, retention, and meaningful learning.

This suggests that clarity in a developed material plays a crucial role in the effective learning of the students with the concept they are acquiring. Clarity provides students with the opportunity to utilize the material clearly and with an organized manner. With the high acceptability of Teacher's Made Guide in the clarity of the material, it reinforces its goal in guiding students with the process of conducting their research.

Table 6 shows the level of acceptability of Teacher's Made Guide in terms of usability, with all indicators receiving a "Very High" verbal interpretation. The highest-rated indicator, "provides activities that are attainable" (M = 3.67, SD = 0.566), suggests that learners find the tasks manageable and feasible within the given context. Additionally, the project is well-organized in terms of discussion and activities (M = 3.65, SD = 0.529), enhancing its effectiveness in guiding students through the learning process. While all aspects of usability were rated highly, the lowest mean score (M = 3.40) was observed in "allows me to finish tasks on my own," indicating a potential area for improvement in promoting independent learning. The indicator "designed for long-term use" (M = 3.44, SD = 0.629) also suggests room for refinement to ensure sustainability over time. With an overall mean extent of acceptability of 3.54, the findings confirm that Teacher's Made Guide is highly user-friendly, accessible, and adaptable, making it an effective tool for research learning.

TABLE 6. Level of acceptability as perceived by the respondents on the features of Teacher's Made Guide in terms of Usability

| I can definitely state that of Teacher's Made Guide.... | Mean | SD | Remarks |
|--|-------------------|------|----------------|
| 1. is user-friendly. | 3.53 | 0.67 | Strongly Agree |
| 2. accessible to all intended learners. | 3.58 | 0.50 | Strongly Agree |
| 3. provides activities that are attainable. | 3.67 | 0.57 | Strongly Agree |
| 4. is well-organized in terms of discussion and activities. | 3.65 | 0.53 | Strongly Agree |
| 5. allows me to finish task on my own. | 3.40 | 0.66 | Strongly Agree |
| 6. can be adjusted to different context, environment or needs. | 3.53 | 0.55 | Strongly Agree |
| 7. designed for long term use. | 3.44 | 0.63 | Strongly Agree |
| 8. can be used with larger group. | 3.51 | 0.63 | Strongly Agree |
| 9. let me remember the instructions easily. | 3.53 | 0.55 | Strongly Agree |
| 10. discusses information comprehensively. | 3.53 | 0.50 | Strongly Agree |
| Weighted Mean | 3.54 | | |
| SD | 0.58 | | |
| Verbal Interpretation | Highly Acceptable | | |

Based on the study of Junus et al. (2015), usability in module design encompasses effectiveness, efficiency, and user satisfaction. This means that the material should enable learners to achieve their learning objectives, have a minimal

effort and confusion, and find the process engaging and fulfilling. As a key aspect of user interface quality, usability focuses on how easily learners can navigate, understand, and interact with the content.

It implies the crucial role of usability in developing educational materials in ensuring the effective and engaging learning experience for students. With the high acceptability of the usability of Teacher's Made Guide, it emphasized the usefulness of this material which is essential in helping students with their research writing as it provides clear guidelines which enables learning in developing their critical thinking skills.

TABLE 7. Level of acceptability as perceived by the respondents on the features of Teacher's Made Guide in terms of User Friendliness

| I can definitely state that Teacher's Made Guide.... | Mean | SD | Remarks |
|---|-------------------|------|----------------|
| 1. includes attractive and visually clear elements. | 3.74 | 0.44 | Strongly Agree |
| 2. provides clear instructions. | 3.72 | 0.45 | Strongly Agree |
| 3. helps me in crafting my research paper. | 3.60 | 0.49 | Strongly Agree |
| 4. provides helpful activities in learning parts of research. | 3.56 | 0.55 | Strongly Agree |
| 5. encourages me in self-paced learning. | 3.49 | 0.63 | Strongly Agree |
| 6. it encourages me to think critically about my findings. | 3.67 | 0.52 | Strongly Agree |
| 7. has engaging and interactive activities that allows me to enjoy. | 3.51 | 0.59 | Strongly Agree |
| 8. easy to navigate with clear and logical organization. | 3.58 | 0.59 | Strongly Agree |
| 9. accommodates diverse learners. | 3.47 | 0.59 | Strongly Agree |
| 10. has clear support optimism. | 3.74 | 0.54 | Strongly Agree |
| Weighted Mean | 3.61 | | |
| SD | 0.55 | | |
| Verbal Interpretation | Highly Acceptable | | |

Table 7 presents the level of acceptability of Teacher's Made Guide in terms of user-friendliness, with all indicators receiving a "Very High" verbal interpretation. The highest-rated indicators, "Includes attractive and visually clear elements" and "has clear support optimism" (M = 3.74, SD = 0.441 and 0.539, respectively), suggest that the project is visually appealing and provides a motivating learning environment. Additionally, the clarity of instructions (M = 3.72, SD = 0.454) contributes to its ease of use. While all indicators were rated highly, the lowest mean score (M = 3.47) was observed in "accommodates diverse learners," indicating a potential area for improvement in ensuring inclusivity. Similarly, "encourages me in self-paced learning" (M = 3.49, SD = 0.631) suggests an opportunity to enhance flexibility for independent learning. With an overall mean extent of acceptability of 3.61, the findings confirm that Teacher's Made Guide is highly user-friendly, well-structured, and effective in supporting students in their research journey.

Supporting the result is the study of Delos Reyes and Pineda (2023), which stated that instructional modules that lacks on a logical flow will be difficult to comprehend and perceive by the learners and consider as unfriendly. The use of

unfamiliar words and complex concepts further hinders accessibility, making this a challenge for students in engaging its content independently. The result of this study described that when modules are written in a non-interactive manner, students often seek external explanations to grasp the material effectively.

It indicates that use-friendliness is needed in the features of any materials being developed. It enables learners to independently use the material that has a clear and simple instructions and content. Also, attractive elements and design provides motivation to learners when using the material; thus, creating an attractive material add more willingness to learners in using the material. With the high level of acceptance in the User-friendliness of Teacher’s Made Guide, this evidently signify that its development is useful in the research writing of the learners.

Level of students’ engagement in the utilization of Teacher’s Made Guide

In this study, the level of students’ engagement in the utilization of Teacher’s Made Guide refers to Active Participation, Collaborative Project, and Active Experimentation.

The following tables show the statement, mean, standard deviation, remarks and verbal interpretation from the perspectives of respondents.

TABLE 8. Level of students’ engagement in the utilization of Teacher’s Made Guide in terms of Active Participation

| I can definitely state that Teacher’s Made Guide.... | Mean | SD | Remarks |
|--|-----------|------|----------------|
| 1. captures my interest in research activities. | 3.65 | 0.48 | Strongly Agree |
| 2. allows me to actively involve in the learning process. | 3.60 | 0.49 | Strongly Agree |
| 3. stimulates my curiosity. | 3.53 | 0.63 | Strongly Agree |
| 4. motivates me to consistently participate in discussions and group work. | 3.49 | 0.55 | Strongly Agree |
| 5. allows me to be collaborative. | 3.44 | 0.59 | Strongly Agree |
| 6. encourages me to focus and be attentive in engaging research tasks. | 3.47 | 0.50 | Strongly Agree |
| 7. encourages me to take initiative in my learning. | 3.42 | 0.66 | Strongly Agree |
| 8. allows me to complete assigned task, activities, and exercises on time and with effort. | 3.56 | 0.55 | Strongly Agree |
| 9. encourages to contribute original ideas and creative ideas. | 3.67 | 0.52 | Strongly Agree |
| 10. actively seek and apply feedback to improve work. | 3.65 | 0.57 | Strongly Agree |
| Weighted Mean | 3.55 | | |
| SD | 0.56 | | |
| Verbal Interpretation | Very High | | |

Table 8 presents the level of student engagement in the utilization of Teacher’s Made Guide in terms of active participation. All indicators received a "Very High" verbal interpretation, with the highest-rated statement, "encourages to contribute original and creative ideas" (M = 3.67, SD = 0.522), suggesting that the project fosters innovation and independent thinking. Similarly, the project effectively captures student interest (M = 3.65, SD = 0.482) and encourages them to seek

and apply feedback (M = 3.65, SD = 0.573), indicating strong student involvement in research tasks. While all indicators were highly rated, the lowest mean score (M = 3.42) was observed in "encourages me to take initiative in my learning," suggesting a potential area for improvement in promoting self-directed learning. With an overall mean extent of engagement of 3.55, the findings confirm that Teacher’s Made Guide successfully promotes active participation, collaboration, and motivation, making it an effective tool in enhancing student engagement in research activities.

This aligns with the study of Nelson (2023), it emphasized that in order to achieve an active participation and collaboration classroom culture, teachers may use activities that will boost cooperation and independency fostering student interaction and teamwork. Encourage earners to share their ideas and generate questions to engage in a meaningful discussion about the topic.

This indicates the importance of activities that promotes cooperation and independence in attaining active participation in using learning material. Encouraging students in participating using material, will be meaningful in the learning process of the students. The high acceptability in the active participation of learners in using Teacher’s Made Guide reinforces its significance in developing and engaging learners the process of research writing.

TABLE 9. Level of students’ engagement in the utilization of Teacher’s Made Guide in terms of Collaborative Project

| I can definitely state that in the utilization of Teacher’s Made Guide.... | Mean | SD | Remarks |
|--|-----------|------|----------------|
| 1. allows me to work well with my peers in the research. | 3.44 | 0.59 | Strongly Agree |
| 2. encourages teamwork and collaboration among our research members. | 3.60 | 0.49 | Strongly Agree |
| 3. teaches us to help each other in completing activities. | 3.70 | 0.51 | Strongly Agree |
| 4. enables us disseminate responsibilities in writing research. | 3.65 | 0.61 | Strongly Agree |
| 5. allows me to feel my input is valued by my team. | 3.53 | 0.59 | Strongly Agree |
| 6. enables collaboration in finishing our research. | 3.51 | 0.63 | Strongly Agree |
| 7. engages students in collective decision making. | 3.60 | 0.54 | Strongly Agree |
| 8. allows me to share my ideas to others. | 3.67 | 0.47 | Strongly Agree |
| 9. pride me confident in sharing opinion to others. | 3.49 | 0.55 | Strongly Agree |
| 10. allows me to be open-minded in accepting opinions of others. | 3.56 | 0.67 | Strongly Agree |
| Weighted Mean | 3.58 | | |
| SD | 0.57 | | |
| Verbal Interpretation | Very High | | |

Table 9 presents the level of student engagement in the utilization of Teacher’s Made Guide in terms of collaboration. All indicators received a "Very High" verbal interpretation, with the highest-rated statement, "teaches us to help each other in completing activities" (M = 3.70, SD = 0.513), indicating that the project fosters a strong sense of teamwork and mutual support among students. Additionally, the project effectively enables students to disseminate responsibilities in research writing (M = 3.65, SD = 0.613) and encourages the sharing of

ideas ($M = 3.67$, $SD = 0.474$), highlighting its role in promoting effective communication and group dynamics. While all aspects of collaboration were rated highly, the lowest mean score ($M = 3.44$) was observed in "allows me to work well with my peers in research," suggesting an opportunity to further enhance cooperation among students.

With an overall mean extent of engagement of 3.58, the findings confirm that Teacher's Made Guide successfully fosters teamwork, collective decision-making, and open-mindedness, making it a highly effective tool in promoting collaborative research efforts.

Based on the study of Kropp et al. (2016), collaboration among learners by enabling communication, sharing ideas, and solve problem is crucial in enhancing their ability to work effectively in a group setting. Collaboration encourages critical thinking as students were exposed with activities that enables them to help and guide each other. The study further presented that learners tend to arrive more comprehensive and insightful conclusions and answers when they engage in a collaborative project.

It gleams that project collaboration is important in enhancing the cooperation and support of students in accomplishing tasks that were given to them. By actively engaging them in cooperative projects, students are not only able to refine their cognitive abilities but also the sense of shared responsibility among their classmates. With the high acceptability of the project collaboration in Teacher's Made Guide, it strongly affirms its effectiveness in developing collaborative skills of learners in accomplishing their research paper.

Table 10 presents the level of student engagement in the utilization of Teacher's Made Guide in terms of active experimentation. All indicators received a "Very High" verbal interpretation, with the highest-rated statement, "allows me to experiment with new ideas" ($M = 3.77$, $SD = 0.427$), indicating that the project strongly encourages students to explore innovative approaches in research. Additionally, students reported that the project enables them to take the initiative in designing and executing research studies ($M = 3.70$, $SD = 0.465$) and actively find solutions to challenges ($M = 3.58$, $SD = 0.499$), highlighting its effectiveness in fostering problem-solving skills. The lowest-rated indicators, "allows me to explore methods and strategies" and "allows me to use my previous knowledge in acquiring new one" ($M = 3.51$), still fall within the "Very High" range, but suggest an area for further reinforcement to strengthen students' application of prior knowledge and research methodologies.

With an overall mean extent of engagement of 3.59, the findings confirm that Teacher's Made Guide effectively promotes hands-on learning, critical thinking, and the integration of feedback, making it a valuable tool in enhancing students' active experimentation in research.

As supported in the study of Taylor et al. (2019), emphasizing active experimentation with the course material enables critical learning ability of the students. By focusing on experimenting with and applying the knowledge being learned, students truly grasp concept especially when they see how it works in practice. Therefore, learning should not be

limited to theoretical understanding but also involve a process where they test, analyze, and reflect on what they are studying.

Table 10. Level of students' engagement in the utilization of Teacher's Made Guide in terms of Active Experimentation

| I can definitely state that Teacher's Made Guide.... | Mean | SD | Remarks |
|---|-----------|------|----------------|
| 1. allows me to use my previous knowledge in acquiring new one. | 3.51 | 0.55 | Strongly Agree |
| 2. enables me to actively find solution to challenges or obstacle. | 3.58 | 0.50 | Strongly Agree |
| 3. allows me to experiment with new ideas. | 3.77 | 0.43 | Strongly Agree |
| 4. allows me to explore methods and strategies. | 3.51 | 0.55 | Strongly Agree |
| 5. encourages me to integrate feedback. | 3.53 | 0.50 | Strongly Agree |
| 6. pushes learners to work together to test and redefine ideas. | 3.53 | 0.55 | Strongly Agree |
| 7. let me analyze the outcome of the studies. | 3.58 | 0.66 | Strongly Agree |
| 8. allows me to combine input from the research studies to existing knowledge. | 3.60 | 0.54 | Strongly Agree |
| 9. encourages me to take the initiative to design and execute research studies. | 3.70 | 0.46 | Strongly Agree |
| 10. shows noticeable improvement in skills in active participation | 3.56 | 0.55 | Strongly Agree |
| Weighted Mean | 3.59 | | |
| SD | 0.53 | | |
| Verbal Interpretation | Very High | | |

This indicates that active experimentation allows students in discovering new concepts on their own practice of the concept. Allowing students to have a hands-on experimentation enables deeply retention and acquiring of the knowledge. With the high level of acceptance with the active experimentation in the Teacher's Made Guide, this reinforces the valuable use of this material in the research writing experience of the learners.

Level of students' competency in the utilization of Teacher's Made Guide

In this study, the level of students' competency in the utilization of Teacher's Made Guide refers to Research Literacy Skills, Writing Skills, and Critical Skills.

The statement, mean, standard deviation, comments, and verbal interpretation from the respondents' points of view are presented in the tables below.

Table 11 presents the level of students' competency in the utilization of Teacher's Made Guide, specifically in terms of research literacy skills. The results indicate a "Very High" level of competency, with a mean extent of 3.60. The highest-rated indicators include guiding students in proper citation and referencing ($M = 3.70$) and familiarizing them with research methodology ($M = 3.67$), highlighting the project's effectiveness in strengthening students' technical research skills. Additionally, competencies in applying critical thinking to evaluate research findings ($M = 3.67$) and collecting and organizing information ($M = 3.63$) also received high ratings, emphasizing the project's role in fostering analytical and organizational skills. These results suggest that Teacher's Made Guide significantly enhances students' research literacy,

equipping them with essential knowledge and skills for conducting research effectively.

TABLE 11. Level of students' competency in the utilization of Teacher's Made Guide in terms of Research Literacy Skills

| I can definitely state that Teacher's Made Guide.... | Mean | SD | Remarks |
|---|-----------|------|----------------|
| 1. enables me to determine my statement of the problem. | 3.58 | 0.54 | Strongly Agree |
| 2. makes me familiarize with the research methodology. | 3.67 | 0.47 | Strongly Agree |
| 3. guides me in properly citing and referencing sources. | 3.70 | 0.46 | Strongly Agree |
| 4. helps me in collecting and organizing information for my research variables. | 3.63 | 0.62 | Strongly Agree |
| 5. allows me in determining the significant people in my research and the benefits they would get in my research. | 3.53 | 0.55 | Strongly Agree |
| 6. enables me to clearly state the conclusion of my research. | 3.47 | 0.55 | Strongly Agree |
| 7. develops clear, focused and relevant research methods. | 3.56 | 0.55 | Strongly Agree |
| 8. encourages me to demonstrate understanding and basic research methods. | 3.60 | 0.54 | Strongly Agree |
| 9. guides me to present and justify conclusion based on evidence. | 3.60 | 0.54 | Strongly Agree |
| 10. enables me to apply critical thinking to evaluate and analyze research findings. | 3.67 | 0.47 | Strongly Agree |
| Weighted Mean | 3.60 | | |
| SD | 0.53 | | |
| Verbal Interpretation | Very High | | |

Based on the study of Kuhlthau, Maniotes & Caspari (2015), it highlights the role in developing research literacy among senior high school students through structured guidance that highlights how students achieve better academic performance when teachers employ scaffolding techniques, providing step-by-step support in the development of their research literacy skills.

It employs how important research literacy skills in writing research. Providing a scaffold material for students helps them in crafting their research. With the high level of acceptability of Teacher's Made Guide as use in developing research literacy skills of the students in writing, this reinforces that this material is beneficial for the research paper of the students.

Table 12 illustrates the level of students' competency in writing skills through the utilization of Teacher's Made Guide. The findings reveal a Very High extent of competency, with an overall mean of 3.57. The highest-rated indicator, "enables me to be careful in proper grammar and the use of language in our research" (M = 3.67), suggests that the project significantly improves students' attention to language accuracy. Additionally, competencies such as effectively discussing interpretations of gathered data (M = 3.62) and expressing ideas clearly and coherently (M = 3.58) received strong ratings, indicating that students feel more confident in their ability to articulate research findings in writing.

Furthermore, the results highlight the project's success in guiding students through research writing format (M = 3.56) and helping them organize their research logically (M = 3.56). While all indicators reflect a "Very High" level of competency, the lowest-rated item, "integrates writing conventions in our research" (M = 3.47), suggests a possible

area for further emphasis. Overall, the findings confirm that Teacher's Made Guide is an effective tool in enhancing students' research writing skills, ensuring clarity, coherence, and correctness in their academic work.

TABLE 12. Level of students' competency in the utilization of Teacher's Made Guide in terms of Writing Skills

| I can definitely state that Teacher's Made Guide.... | Mean | SD | Remarks |
|--|-----------|------|----------------|
| 1. gives me confidence in discussing information in our research. | 3.56 | 0.55 | Strongly Agree |
| 2. enables me to express my ideas clearly and coherently in writing. | 3.58 | 0.54 | Strongly Agree |
| 3. enables me to be careful in proper grammar and the use of language in our research. | 3.67 | 0.53 | Strongly Agree |
| 4. helps me to organize our research logically and effectively. | 3.56 | 0.50 | Strongly Agree |
| 5. allows me to make informed decision based on evidence | 3.56 | 0.55 | Strongly Agree |
| 6. allows me to revise my written works. | 3.58 | 0.50 | Strongly Agree |
| 7. integrates writing conventions in our research. | 3.47 | 0.59 | Strongly Agree |
| 8. challenges me to finish the writing activities which will be used in our research. | 3.51 | 0.63 | Strongly Agree |
| 9. guides me with the research writing format. | 3.56 | 0.55 | Strongly Agree |
| 10. allows me to effectively discuss interpretation from the gathered data. | 3.62 | 0.54 | Strongly Agree |
| Weighted Mean | 3.57 | | |
| SD | 0.55 | | |
| Verbal Interpretation | Very High | | |

Based on the study of Bangun (2016), it reveals authentic materials play a crucial role in enhancing students' writing achievement specifically in improving various aspects of writing. By incorporating real-life materials into writing instruction, students become more engaged and motivated in the learning process. This heightened engagement encourages students to explore and acquire new vocabulary which helps them enrich their writing skills. With the utilization of authentic materials, learners have confidence in expressing their ideas through writing.

It gleams that writing skills are essential for students in conducting research papers that are required in the senior high school level. Developed materials help students in guiding them into the writing process of their paper. With the high level of acceptability with the positive help of Teacher's Made Guide in the students' writing skills, this reinforces that this material is beneficial and helpful in the writing process of the students in research.

Table 13 highlights the Very High level of students' competency in critical thinking skills through the utilization of Teacher's Made Guide, with an overall mean of 3.60. The highest-rated indicator, "helps me approach problems from multiple perspectives" (M = 3.72), suggests that the project successfully fosters analytical and evaluative thinking. Similarly, "allows me to compare and contrast different ideas, theories, and perspectives" (M = 3.70) and "encourages me to apply critical thinking in evaluating our own research paper" (M = 3.70) reflect the students' ability to critically assess various viewpoints and apply logical reasoning.

TABLE 13. Level of students' competency in the utilization of Teacher's Made Guide in terms of Critical Thinking Skills

| I can definitely state that Teacher's Made Guide.... | Mean | SD | Remarks |
|--|-----------|------|----------------|
| 1. allows me to regularly analyze and evaluate information from our research. | 3.63 | 0.49 | Strongly Agree |
| 2. enables me to identify biases information. | 3.60 | 0.54 | Strongly Agree |
| 3. helps me approach problems from multiple perspectives. | 3.72 | 0.45 | Strongly Agree |
| 4. allows me to conclude based on the credible information. | 3.56 | 0.63 | Strongly Agree |
| 5. allows me to make informed decision based on evidence. | 3.60 | 0.49 | Strongly Agree |
| 6. allows me to engage in self-reflection. | 3.44 | 0.55 | Strongly Agree |
| 7. allows me to compare and contrast different ideas, theories, and perspective. | 3.70 | 0.46 | Strongly Agree |
| 8. allows me to evaluate potential outcomes or consequences. | 3.49 | 0.55 | Strongly Agree |
| 9. allows me to demonstrate deep understanding and complex issues. | 3.60 | 0.49 | Strongly Agree |
| 10. encourages me to apply critical thinking in evaluating our own research paper. | 3.70 | 0.60 | Strongly Agree |
| Weighted Mean | 3.60 | | |
| SD | 0.53 | | |
| Verbal Interpretation | Very High | | |

Moreover, indicators such as "allows me to regularly analyze and evaluate information from our research" (M = 3.63) and "enables me to identify biased information" (M = 3.60) further reinforce that students are becoming more discerning and evidence-based in their research approach. The lowest-rated item, "allows me to engage in self-reflection" (M = 3.44), suggests that while students are developing strong analytical skills, opportunities for deeper introspection and metacognition could be further strengthened. Overall, these findings confirm that Teacher's Made Guide significantly enhances students' critical thinking skills, enabling them to analyze, compare, and evaluate research data effectively while making well-informed decisions based on credible evidence.

Based on the study of Nair (2017), students do positively respond to the learning environment that encourages them in the increase engagement and enthusiasm. This study suggests that carefully selecting diverse teaching methods and materials can significantly enhance the comprehension and learning of the students. Educators can create more dynamic and meaningful learning process through the use of various instructional strategies.

TABLE 14. Significant Relationship between the acceptability as perceived by the respondents on the components, features and students' engagement in the utilization of Teacher's Made Guide

| Acceptability of Teacher's Made Guide | | Students' engagement | | |
|---------------------------------------|-------------------------|----------------------|-----------------------|------------------------|
| | | Active Participation | Collaborative Project | Active Experimentation |
| Components | | | | |
| Objective | Pearson Correlation | 0.4320 | 0.6952 | 0.4884 |
| | Significance (2-Tailed) | 0.1439 | 0.0114 | 0.0225 |
| | N | 42 | 42 | 42 |
| | Analysis | Not Sig | Sig | Sig |
| Content | Pearson Correlation | 0.6258 | 0.5460 | 0.5152 |
| | Significance (2-Tailed) | 0.0043 | 0.0024 | 0.0010 |
| | N | 42 | 42 | 42 |
| | Analysis | Sig | Sig | Sig |
| Activity | Pearson Correlation | 0.5622 | 0.5678 | 0.5179 |
| | Significance (2-Tailed) | 0.0114 | 0.0029 | 0.0013 |
| | N | 42 | 42 | 42 |
| | Analysis | Sig | Sig | Sig |
| Assessment | Pearson Correlation | 0.6106 | 0.7455 | 0.5575 |
| | Significance (2-Tailed) | 0.9559 | 0.3945 | 0.3474 |
| | N | 42 | 42 | 42 |
| | Analysis | Not Sig | Not Sig | Not Sig |
| Features | | | | |
| Clarity | Pearson Correlation | 0.5182 | 0.5357 | 0.3945 |
| | Significance (2-Tailed) | 0.7883 | 0.7172 | 0.5606 |
| | N | 42 | 42 | 42 |
| | Analysis | Not Sig | Not Sig | Not Sig |
| Usability | Pearson Correlation | 0.6154 | 0.6518 | 0.5259 |
| | Significance (2-Tailed) | 0.8081 | 0.3397 | 0.2472 |
| | N | 42 | 42 | 42 |
| | Analysis | Not Sig | Not Sig | Not Sig |
| User Friendliness | Pearson Correlation | 0.5946 | 0.6665 | 0.4512 |
| | Significance (2-Tailed) | 0.1132 | 0.3822 | 0.6244 |
| | N | 42 | 42 | 42 |
| | Analysis | Not Sig | Not Sig | Not Sig |

| Correlation Coefficient Value (r) | Direction and Strength of Correlation |
|-----------------------------------|---------------------------------------|
| 0.00 to 0.19 | Very Weakly Positive |
| 0.20 to 0.39 | Weakly Positive |
| 0.40 to 0.59 | Moderately Positive |
| 0.60 to 0.79 | Strongly Positive |
| .80 to 1.00 | Perfectly Positive |

TABLE 15. Significant Relationship between the acceptability as perceived by the respondents on the components, features and student s’ competency in the utilization of Teacher’s Made Guide

| Acceptability of Teacher’s Made Guide | | Students’ competency | | |
|---------------------------------------|-------------------------|--------------------------|----------------|-----------------|
| | | Research Literacy Skills | Writing Skills | Critical Skills |
| Components | | | | |
| Objective | Pearson Correlation | 0.4482 | 0.4179 | 0.4134 |
| | Significance (2-Tailed) | 0.0125 | 0.0734 | 0.0124 |
| | N | 42 | 42 | 42 |
| | Analysis | Sig | Not Sig | Sig |
| Content | Pearson Correlation | 0.5105 | 0.3681 | 0.498 |
| | Significance (2-Tailed) | 0.0003 | 0.0095 | 0.0003 |
| | N | 42 | 42 | 42 |
| | Analysis | Sig | Sig | Sig |
| Activity | Pearson Correlation | 0.4837 | 0.5791 | 0.6106 |
| | Significance (2-Tailed) | 0.0006 | 0.0027 | 0.0000 |
| | N | 42 | 42 | 42 |
| | Analysis | Sig | Sig | Sig |
| Assessment | Pearson Correlation | 0.6027 | 0.4526 | 0.5156 |
| | Significance (2-Tailed) | 0.1786 | 0.6761 | 0.1965 |
| | N | 42 | 42 | 42 |
| | Analysis | Not Sig | Not Sig | Not Sig |
| Features | | | | |
| Clarity | Pearson Correlation | 0.4528 | 0.5959 | 0.6921 |
| | Significance (2-Tailed) | 0.3419 | 0.8673 | 0.1765 |
| | N | 42 | 42 | 42 |
| | Analysis | Not Sig | Not Sig | Not Sig |
| Usability | Pearson Correlation | 0.6292 | 0.5858 | 0.6150 |
| | Significance (2-Tailed) | 0.0832 | 0.4802 | 0.0726 |
| | N | 42 | 42 | 42 |
| | Analysis | Not Sig | Not Sig | Not Sig |
| User Friendliness | Pearson Correlation | 0.5907 | 0.5261 | 0.5264 |
| | Significance (2-Tailed) | 0.8428 | 0.2829 | 0.8995 |
| | N | 42 | 42 | 42 |
| | Analysis | Not Sig | Not Sig | Not Sig |

| Correlation Coefficient Value (r) | Direction and Strength of Correlation |
|-----------------------------------|---------------------------------------|
| 0.00 to 0.19 | Very Weakly Positive |
| 0.20 to 0.39 | Weakly Positive |
| 0.40 to 0.59 | Moderately Positive |
| 0.60 to 0.79 | Strongly Positive |
| .80 to 1.00 | Perfectly Positive |

It employs that critical thinking skills of the learners is acquired with a kind of teaching strategies and materials educator provides to them. Materials should allow students to solve a problem in a multiple perspective. With the high acceptability of critical thinking skills in in the utilization of Teacher’s Made Guide, this indicates that the material will be a useful tool in helping students analyze, synthesise, interpret, and apply concept.

Test of Relationship between the acceptability as perceived by the respondents on the components, features and students’ engagement in the utilization of Teacher’s Made Guide

To test the significant relationship between the acceptability as perceived by the respondents on the components, features and students’ engagement in the utilization of Teacher’s Made Guide in terms of Active Participation, Collaborative Project, and Active Experimentation they were treated statistically using Real Statistics Data Analysis Tools using the Pearson product moment correlation coefficient.

This employs that in order to attain the students’ engagement using developed materials, it should be well-structured and interactive for the students to be more

participative. Teacher’s Made Guide encourages students to be an active participant in the activities provided that is aligned with the objectives that highlights the attainment of competencies needed in writing research.

Test of Relationship between the acceptability as perceived by the respondents on the components, features and students’ competency in the utilization of Teacher’s Made Guide

To test the significant relationship between the acceptability as perceived by the respondents on the components, and students’ competency in the utilization of Teacher’s Made Guide in terms of Research Literacy Skills, Writing Skills, and Critical S they were treated statistically using Real Statistics Data Analysis Tools using the Pearson product moment correlation coefficient.

Table 15 shows that at 0.05 level of significance, the null hypothesis “There is no significant relationship between the acceptability as perceived by the respondents on the components, features and students’ competency in the utilization of Teacher’s Made Guide” is accepted, which incites that there is no significant relationship between them.

Based on the result of the study of Kuh (2018), it highlights that acquiring competence of students not solely

depends on the material being used. It is the mentorship, and experiential learning in majority does play the crucial role in teaching the students the competency they needed. While material is a tool to guide students in learning, active involvement of teachers, mentors, and the real-world experiences ensures that students develop the significant skills, knowledge, and competencies.

This indicates that ensuring the component and features of material is important but not directly affects the attainment of the intended research competence of students. With the well-structured and clear objectives, content, and activities of Teacher's Made Guide, it did not directly determine the success in enhancing students research competence. Other factors may also play significant in influencing students' research competence.

IV. CONCLUSION AND RECOMMENDATIONS

Based on the findings of the study, there is no significant relationship between Teacher's Made Guide and the student's engagement. Therefore, the components and features of Teacher's Made Guide has no direct relation with the enhancement of students' engagement in writing school-based research. Likewise, there is no significant relation between Teacher's Made Guide and the research competence of students. Hence, the components and features of Teacher's Made Guide does not directly correspond on the improvement of students' competence. Therefore, the null hypothesis that there is no correlation between students' competence and Teacher's Made Guide is supported. This implicates that other variables may play more critical roles in influencing the students' engagement and competence in writing school-based research

Based on the findings and conclusions drawn from this study, the following recommendations are proposed:

Teachers may utilize Teacher's Made Guide as reference material in guiding students through the process of research writing.

Since the study determined that Teacher's Made Guide is helpful and easy to use, it may be suggested that students may use this material as a primary material to support and enhance their research writing skills.

Teacher's Made Guide may be recommended to the school administrators to train teachers to equip teachers with the strategies that may improve students' performance in research writing.

Future researchers may use and consider Teacher's Made Guide in other track and strands in Senior High School and or to other grade levels. They may incorporate teaching strategies that will enhance students' engagement and research competence.

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