

AN EXPLANATORY SEQUENTIAL STUDY ON MULTIMEDIA INSTRUCTION AND ENGLISH LEARNING ATTITUDE OF SENIOR HIGH STUDENTS

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Abstract. This study investigates the significant relationship between multicultural instruction and the English learning attitudes of senior high school students. The research involved a sample of 150 senior high school students from Cluster 4 Public Secondary Schools in Davao City for the quantitative phase, and 10 students were selected for in-depth interviews (IDIs) and focus group discussions (FGDs) in the qualitative phase. Employing a mixed-method research design with an explanatory sequential approach, the data collected were analyzed using mean and Pearson's r correlation analysis. The findings indicated that multicultural instruction was rated as moderately extensive, while the English learning attitude of senior high school students was rated as extensive. Correlation analysis revealed a significant relationship between multicultural instruction and the English learning attitudes of the students. Thematic analysis corroborated the quantitative findings, highlighting increased motivation, alignment with technology skills, and self-directed learning as key factors confirming the significant relationship between multicultural instruction and students' English learning attitudes. The study's findings advocate for further dissemination through publication in reputable research journals.

KEY WORDS

1. intellectual intuition
2. multimedia instruction
3. English learning attitude

1. Introduction

Multimedia instruction in English language learning positively impacts the attitude of senior high school students by enhancing engagement, making English relevant, catering to diverse learning styles, improving comprehension, increasing confidence, and fostering a long-term interest in language learning. Multimedia instruction makes learning more engaging and interactive. It often includes videos, animations, interactive exercises, and multimedia resources that capture students' attention and maintain their interest. Engaged students are more likely to have a positive attitude towards English learning. More so, students exposed to multimedia instruction may be more motivated to explore additional English learning resources independently. This proactive engagement can lead to a more positive attitude as they take ownership of their learning. Globally, Alrabai (2018) reported that students may perceive English language learning as irrelevant to their daily lives or future goals. If they cannot see the practical benefits of learning English or how it relates to their personal interests and aspirations,

they may lack motivation to engage actively in the learning process. According to Alzamil (2019), when students fail to see the practical benefits of learning English or understand how it relates to their personal interests and aspirations, they may struggle to find the motivation to actively participate in English language activities. In Thailand, previous negative experiences with English learning, such as failure, embarrassment, or frustration, can significantly impact students' attitudes towards the language. These experiences may lead to feelings of inadequacy or a lack of confidence in their English abilities, resulting in disengagement and avoidance of English-related activities. Failure in English learning, such as poor grades on exams or assignments, can be demoralizing for students and lead to feelings of inadequacy or incompetence. This sense of failure may reinforce negative beliefs about their abilities to learn English and erode their confidence in their language skills (Panmei, 2021). In East Asia, Galloway, Numajiri, and Rees (2020) reported that students who doubt their ability to learn English or believe that they are not capable of achieving proficiency may develop a negative attitude towards the language. Low self-efficacy can be influenced by factors such as past academic performance, comparisons with peers, or negative feedback from teachers or peers. Students who have experienced academic setbacks or struggled with English learning in the past may internalize these failures and develop a sense of incompetence. Taking things in Philippines setting, Gatcho and Hajan (2019) noted that poorly designed or implemented teaching methods can hinder students' language learning progress and contribute to negative attitudes. If instruction is overly focused on rote memorization, grammar drills, or passive learning activities, students may become bored, frustrated, or disengaged. Additionally, Ricohermoso, Abequibel, and Alieto (2019) asserted that inadequate access to resources, such as text-

books, technology, or language learning materials, can hinder students' language development and negatively impact their attitudes towards English learning. Without sufficient support and resources, students may struggle to make progress and feel discouraged. While existing studies have explored the short-term impact of multimedia instruction on English learning attitudes among senior high school students, there is a notable gap in our understanding of the sustainability of these positive changes in attitude over time. Few studies have delved into whether students' attitudes remain positive in subsequent academic years or if there is a potential decline, which can be crucial for long-term educational planning and interventions. Thus, it is on this context that the researcher felt the need to fill-in the research gap of conducting a study in the Philippine context, particularly in the Cluster 4 schools in Davao City using a mixed-method approach. Specifically, the researcher made use of an explanatory sequential design to have a better understanding of the relationship between multimedia instruction and the English learning attitude of senior high school students, which is found to be scarce.

1.1. Theoretical/Conceptual Framework—

This study was anchored on Subaidi bin Abdul Samat and Aziz's (2020) proposition that multimedia instruction frequently includes videos, animations, interactive quizzes, and games, which engage students' attention more effectively than traditional teaching methods. When students are engaged, their motivation to actively participate in the learning process increases. When students find the learning process enjoyable and engaging, they are more likely to be intrinsically motivated. This intrinsic motivation is crucial as it drives students to participate actively, seek out additional resources, and invest more effort in their studies. In support, Rokaya (2018) suggested that students' intrinsic motivation to learn is heightened when they comprehend the practical applica-

tions of their English skills in real-life contexts. When students see the practical benefits of learning English, they are more likely to be engaged in their studies. For instance, a student who realizes that English is essential for watching their favorite movies without subtitles or understanding the lyrics of popular songs will be more enthusiastic about mastering the language. This engagement is crucial because it drives sustained effort and interest in the subject matter. Moreover, a pragmatic paradigm was applied in this study. It aims to identify the problem and view it within its broadest context. The pragmatic paradigm prioritizes practical solutions to real-world problems (Hafsa, 2019). In the context of multimedia instructions and English language attitudes of students, this means focusing on interventions and strategies that can effectively improve students' knowledge, attitudes, and behaviors related to multimedia instructions and English language attitudes. Rather than solely theoretical or abstract approaches, the pragmatic paradigm emphasizes the importance of feasible, cost-effective, and sustainable interventions within the constraints of school settings. Lastly, pragmatism encourages integrating multiple perspectives and stakeholders' input in problem-solving processes (Gobo, 2023). In the context of adolescent reproductive health literacy means involving students, parents, educators, healthcare providers, policymakers, and community members in the design, implementation, and evaluation of reproductive health education initiatives. By incorporating diverse perspectives and experiences, interventions can

1.2. Statement of the Problem—This study addressed the relationship between multimedia instruction and English learning attitude of senior high school students in Cluster 4 Public Secondary Schools in Davao City. An explanatory sequential mixed methods design was used, and it involved collecting qualitative data after

be more relevant, culturally sensitive, and responsive to the needs of students and communities. Figure 1 shows the conceptual framework of the study. The study consists of two variables. The independent variable is multimedia instruction or educational approach that utilizes a combination of various media types, such as text, images, audio, video, and interactive elements, to deliver content and facilitate learning. The measure of multimedia instruction, according to Karel and Tomas (2017) are learning outcomes or specific knowledge, skills, and abilities that learners are expected to acquire as a result of instructional activities; engagement or the level of interest, attention, and active participation that students exhibit when interacting with multimedia-based educational materials or methods; and learner satisfaction or the extent to which students are content with their academic experience when engaging with multimedia-based learning materials and process. The dependent variable was English learning attitude or the mindset, beliefs, and emotions that students have towards learning the English language. The measures of English learning attitude, according to Meral (2019) are interested in learning or the students' overall feelings, beliefs, and motivation related to studying the English language; sense of belonging or the emotional and psychological connection that students have with their English learning environment; and self-concept in learning or the students' beliefs, perceptions, and self-assessment regarding their English language learning abilities and potential.

quantitative results to explain or follow up on the quantitative results in more depth. In the quantitative phase of the study, primary data was collected from the senior high school students in Cluster 4 Public Secondary Schools in Davao City regarding knowledge about multimedia instruction and the English learning

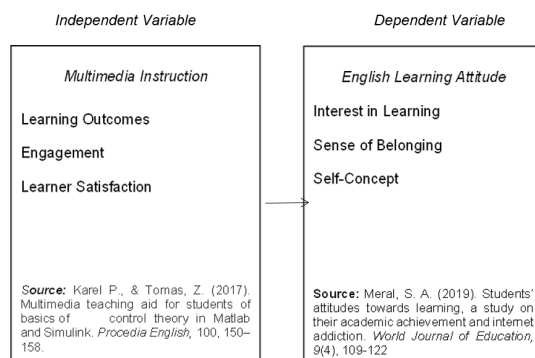


Fig. 1. The Conceptual Framework of the Study

attitude of senior high school students. The qualitative phase was conducted to establish the authenticity of the correlation output obtained from the quantitative results. The research questions underlying the investigation in this study are as follows:

- (1) What is the extent of multimedia instruction in Cluster 4 Public Secondary Schools in Davao City (quantitative)?
- (2) What is the extent of the English learning attitude of senior high school students in Cluster 4 Public Secondary Schools in Davao City (quantitative)?
- (3) Is there a significant relationship between multimedia instruction and the English learning attitude of senior high school students in Cluster 4 Public Secondary Schools in Davao City (quantitative)?
- (4) What are the standpoints of the participants on the salient points of the results on the extent of multimedia instruction and English learning attitude of senior high school students in Cluster 4 Public Secondary Schools in Davao City (qualitative)?
- (5) What are the standpoints of the participants on the salient points of the results on the significant relationship between multimedia instruction and English learning attitude of senior high school students in Cluster 4 Public Secondary Schools in Davao City (qualitative)?

1.3. *Hypothesis*—The following null hypotheses were tested at 0.05 level of significance: H01: There is no statistically significant relationship between multimedia instruction and the English learning attitude of senior high school students in Cluster 4 Public Secondary Schools in Davao City. The current study was beneficial to identified sectors of the academe, which include: Department of Education. The Department of Education can use the study’s findings to make informed decisions regarding the integration of multimedia instruction in the curriculum. This can lead to policies

that enhance the quality of English education in public schools. School Principals. School principals can benefit from the study by allocating resources more effectively. If multimedia instruction is found to positively impact English learning attitudes, school heads can allocate budgets and resources accordingly. English Teachers. English teachers can gain insights into the effectiveness of multimedia instruction in improving students’ attitudes towards English learning. They can adapt and develop pedagogical strategies that make use of multimedia resources to engage and motivate their students.

Senior High School Students. Students can experience more engaging and interactive English language learning experiences through multimedia instruction. This can lead to increased motivation, better language proficiency, and a more positive attitude towards English learning. Future Researchers. A mixed method study can serve as a valuable foundation for future research. It can provide insights into the gaps in knowledge and areas that require further exploration, inspiring future researchers to build upon the findings. For more comprehensive understanding, the following terms were defined operationally: Multimedia Instruction. It is defined as the educational approach that utilizes

a combination of various media types, such as text, images, audio, video, and interactive elements, to deliver content and facilitate learning. In this study refers to the independent variable being describe in terms of the following indicators: learning outcomes; engagement; and learner satisfaction. English Learning Attitude of Senior High School Students. It is defined as the mindset, beliefs, and emotions that students have towards the process of learning the English language. In this study refers to the dependent variable being describe in terms of the following indicators: interest in learning, sense of belonging, self-concept in learning, and control strategies.

2. Methodology

This section contains the research design, research respondents, research instrument, data gathering procedure, and data analysis. It should be noted that in the preparation of this paper, the researcher employed artificial intelligence tools for proofreading. Specifically, AI was utilized to enhance the accuracy, coherence, and overall quality of the manuscript. This practice is being explicitly stated to maintain transparency and adhere to ethical standards in research. The usage of AI for proofreading reflects a commitment to leveraging advanced technologies responsibly and acknowledges the increasing prevalence and capability of AI in academic and professional writing.

2.1. Research Design—The researcher employed mixed methods in this study, specifically an explanatory sequential research design. Toyon (2021) defines a mixed-method research design as a research approach combining qualitative and quantitative methodologies. It involved collecting and analyzing quantitative data (such as numerical measurements or statistical analyses) and qualitative data (such as observations or interviews) to better understand the research topic. Mixed-method research designs were employed when researchers sought to explore complex phenomena that could not be fully understood using only one methodological approach. By combining quantitative and qualitative data collection and analysis techniques, researchers could complement

each other's strengths and weaknesses, providing a more nuanced and holistic understanding of the research problem. An explanatory sequential approach was a mixed methods approach where quantitative data was collected and analyzed first, followed by qualitative data collection and analysis to provide additional depth and understanding (Birgili Demir, 2022). In this design, the quantitative phase typically preceded the qualitative phase, and the qualitative phase was used to help explain or elaborate on the quantitative findings. This sequential process allowed researchers to gain a more comprehensive understanding of the research problem by integrating both quantitative and qualitative perspectives. By sequentially combining quantitative and qualitative data, re-

searchers could gain deeper insights and provide a more comprehensive analysis of the research topic (Othman, Steen Fleet, 2020). In the quantitative phase, the researcher used correlational research techniques to gather data, ideas, facts, and information related to the study. The descriptive-correlational approach was a research method that aimed to establish the relationship or association between two or more variables without implying causation. In this design, researchers measured the degree of relationship or correlation between variables to understand how changes in one variable may be related to changes in another. Correlational research typically involves collecting data on the variables of interest from a sample population and then analyzing the data to determine a relationship between them (Pace, 2019). In the context of this study, correlational research allowed the researcher to examine the relationship between multimedia instruction and the English language attitude of senior high school students. In the qualitative phase, the researcher used a phenomenological approach. A phenomenological study was used to explore and understand individuals' lived experiences, perceptions, and perspectives of a particular phenomenon. It focused on uncovering the essence or meaning of these experiences from the participants' own perspectives (Williams, 2021). This design allowed researchers to delve deeply into the subjective experiences of the participants and gain insights into how they understood and navigated issues related to multimedia instruction and English language attitude of senior high school students. Researchers employing this approach typically conducted in-depth interviews or focus group discussions with senior high school students to explore their experiences, beliefs, attitudes, and behaviors regarding reproductive health literacy. Through open-ended questioning and active listening, researchers could uncover the underlying meanings and themes embedded within the partic-

ipants' narratives. The sequential explanatory mixed method design would be highly appropriate for a study exploring the multimedia instruction and English language attitude of senior high school students. Firstly, the quantitative phase of the study, which includes correlational and comparative techniques, would allow the researcher to quantitatively analyze the relationship between multimedia instruction and English language attitude of senior high school students. By comparing the mean scores or levels of reproductive health literacy between the two genders, the researcher could identify any disparities and differences in knowledge, attitudes, or behaviors related to English language attitude of senior high school students. Following the quantitative phase, the qualitative phase employing a phenomenological approach would deepen the understanding of the quantitative findings. Through in-depth interviews or focus group discussions with senior high school students, the researcher could explore the lived experiences, perceptions, and perspectives of students regarding multimedia instruction and English language attitudes. This qualitative phase would provide rich insights into how students perceive and navigate multimedia instruction issues, shedding light on the underlying factors influencing their English language attitude. The sequential explanatory mixed method design would allow for a comprehensive exploration of the relationship between multimedia instruction and the English language attitude of senior high school students. By combining quantitative and qualitative approaches, the researcher can obtain a nuanced understanding of the research topic, bridging the gap between statistical analysis and lived experiences. This integrated approach would strengthen the validity and reliability of the study findings, providing valuable insights for addressing reproductive health education and promoting gender-sensitive approaches in senior high school settings.

2.2. *Research Respondents*—Quantitative Phase. The study's respondents were senior high school students in Cluster 4 Public Secondary Schools in Davao City. The 150 respondents were selected through a stratified random sampling technique in this study. Stratified random sampling is a method of sampling that involves the division of a population into smaller sub-groups known as strata. According to Shi (2015), in stratified random sampling, or stratification, the strata are formed based on members' shared attributes or characteristics, such as income or educational attainment. Stratified random sampling is appropriate in this study because there is heterogeneity in a population that can be classified with ancillary information. The primary consideration of this study was to select respondents who can provide information to achieve the purpose of this study. The inclusion criteria are as follows: students should have a basic level of English language proficiency to engage effectively in English language learning activities involving multimedia instruction; respondents must be senior high school students, typically aged 15 to 18 years, enrolled in either Grade 11 or Grade 12; students must be enrolled in schools within Cluster 4 of Davao City's public secondary education system to ensure the study's relevance to the specific educational context; and those who voluntarily signed the ICF were given the survey questionnaires. Qualitative Phase. The researcher purposively selected 5 senior high school students for the in-depth interview (IDI) and 5 senior high school students for the focus group discussion (FGD). A total of 10 senior high school students in Cluster 4 Public Secondary Schools in Davao City were invited as participants. Inclusion criteria used were as follows: students should have a basic level of English language proficiency to engage effectively in English language learning activities involving multimedia instruction; respondents must be senior high school students, typically aged 15 to 18 years, enrolled in ei-

ther Grade 11 or Grade 12; students must be enrolled in schools within Cluster 4 of Davao City's public secondary education system to ensure the study's relevance to the specific educational context; and those who voluntarily signed the ICF were given the survey questionnaires. It was also considered that the numbers of males and females were well represented. Purposive sampling was apt for the qualitative participant selection of this study because, according to Daymon and Holloway (2011), it is a technique wherein a sample will be chosen based on their particular features or characteristics, which enables detailed exploration and understanding of the constructs under the study and research questions. As denoted by Miles et al. (2014), purposive sampling is well suited to in-depth qualitative studies.

2.3. *Research Instrument*—This study used two sets of instruments: one for the quantitative phase and one for the qualitative phase. A panel of experts subjected these questionnaires to content validity and underwent pilot testing to test their validity and reliability. The experts' comments, corrections, and suggestions were incorporated into the final revisions of the questionnaires. Quantitative Phase. In the quantitative phase, the researcher used an instrument concerned with multimedia instruction. This questionnaire indicated learning outcomes, engagement, and learner satisfaction. The reliability of the scale obtained Cronbach's alpha value of 0.943 described as excellent, indicating high reliability and consistency among the items. A Cronbach's alpha value closer to 1.0 indicates greater reliability, suggesting that the items are highly correlated with each other and effectively measure the intended construct. In this case, the alpha value of 0.943 indicates that the items in the scale are highly reliable and consistent, providing confidence in the accuracy of the measurements. In answering the questionnaire, the respondents used the 5-Likert scale, in which 5 or very extensive was the highest

while 1 or not extensive was the lowest. As a guide in determining the extent of multimedia instruction, the researcher made use of the range of means, descriptions and interpretations as presented below:

Range of Mean and Descriptive Levels of Multimedia Instruction

Range of Mean	Descriptive Level	Interpretation
4.20 – 5.00	Very Extensive	The multimedia instruction is always observed.
3.40 – 4.19	Extensive	The multimedia instruction is oftentimes manifested.
2.60 – 3.39	Moderately Extensive	The multimedia instruction is sometimes manifested.
1.80 – 2.59	Less Extensive	The multimedia instruction is seldom manifested.
1.00 – 1.79	Not Extensive	The multimedia instruction is never manifested.

The second part is concerned with the English learning attitude of senior high school students in Cluster 4 Schools in Davao City. This questionnaire comprised 20 statements measured in terms of interest in learning, sense of belonging, self-concept in learning, and control strategies. The questionnaire underwent pilot testing and obtained an alpha coefficient of 0.925. The high alpha coefficient value of

0.925 obtained during pilot testing indicates that the questionnaire has undergone rigorous validation and demonstrates internal solid consistency. This enhances confidence in the questionnaire’s ability to measure the targeted construct in subsequent administrations effectively. The instrument made use of a 5-point Likert scale that was determined based on the following range of mean:

Range of Mean and Descriptive Levels of English Learning Attitude

Range of Mean	Descriptive Level	Interpretation
4.20 – 5.00	Very Extensive	The English learning attitude of senior high school students is always manifested.
3.40 – 4.19	Extensive	The English learning attitude of senior high school students is oftentimes manifested.
2.60 – 3.39	Moderately Extensive	The English learning attitude of senior high school students is sometimes manifested.
1.80 – 2.59	Less Extensive	The English learning attitude of senior high school students is seldom manifested.
1.00 – 1.79	Not Extensive	The English learning attitude of senior high school students is never manifested.

Qualitative Phase. The researcher conducted an IDI and FGD with a total of 10 senior

high school students using a semi-structured interview. The use of the semi-structured ap-

proach was essential to discover new themes that emerged during the interview. As Bryman and Bell (2011) described, is flexible and less rigid than structured. The researcher made an interview guide composed of open-ended questions to probe the participants' lived experiences with regard to multimedia instruction and the English language attitude of senior high

2.4. Data Gathering Procedure—Steps were undergone by the researcher in conducting the study after the validation of the research questionnaire.

Quantitative Phase Permission to Conduct the Study. The researcher secured the permission to conduct the study. The researcher secured the endorsement from the Dean of the Graduate School in Rizal Memorial Colleges, Inc., Davao City. The endorsement letter from the Dean of the Graduate School in Rizal Memorial Colleges, Inc., Davao City, was attached to the permission letters to be endorsed to the school's division superintendent and then to the school principals of the selected public secondary schools in Cluster 4 Schools in Davao City. Distribution and Retrieval of the Questionnaire. After the approval to conduct the study, the researcher proceeded to distribute the research instrument to the respondents. The study was conducted last October 9-12, 2023. Upon the distribution of the questionnaires, the benefits of the survey were briefly discussed and explained to the identified respondents. More so, the respondents were given enough testing time for the questionnaires to be finished. After this, the data collected were subjected to quantitative analysis. Collation and Statistical Treatment of Data. After the questionnaire was retrieved, the scores of each respondent were tallied to organize the data per indicator. After that, each score was subjected to descriptive and inferential analysis using SPSS. Qualitative Phase For the qualitative data collection, IDI and FGD were conducted to gather the lived

school students. Also, the researcher probed how these experiences shape their beliefs, attitudes, and commitment toward learning. This interview guide had undergone content validation by three experts in the field of education. Their comments, corrections, and suggestions were incorporated in the final revisions of the questionnaires.

experiences of the participants with regard to multimedia instruction and the English learning attitude of senior high school students after the invited participants had emailed back the signed ICF. Regarding the conduct of the IDI and FGD, the researcher reflected in the ICF that the process had to be recorded. Only those invited participants who could email back their signed ICF were scheduled to join the IDI and FGD. Also, the researcher ensured that her schedule was most convenient for the participants. Using the validated open-ended questionnaire, she had to limit the IDI and FGD sessions to 30 to 40 minutes. In addition, she discussed thoroughly the ethical considerations to the participants. Also, the participants' perspectives on the phenomenon of interest were revealed according to how they viewed it and not as the researcher viewed it. Also, since the interview involved a personal interaction where cooperation was essential (Creswell, 2013), the researcher who acted as the interviewer saw to it that she had a good rapport with the interviewees by using a non-threatening stance during the IDI. Likewise, for the FGD, the researcher sent an email or text through messenger to confirm the availability of the participants who signed up to join the FGD at the time scheduled for the session. An invite was emailed at least two days before the scheduled FGD session. The researcher acted as the facilitator during the FGD and stimulated the discussion or brainstorming through sensibly chosen guide statements prepared beforehand and validated by a panel of experts. Participants in the FGD were informed before the submis-

sion of the signed ICF, and they were informed that the whole session was going to be recorded.

2.5. Trustworthiness of the Study—To establish the trustworthiness of the study, the researcher followed the four proposed criteria in evaluating interpretive research work by Lincoln and Guba (1985), which are as follows: credibility, transferability, dependability, and confirmability. The trustworthiness of this study was addressed through a thorough collection of data through in-depth interviews, document review, and participants' drawings supported by in-depth interviews with teachers and participants' mothers for triangulation. *Credibility.* Credibility refers to the degree to which the research findings accurately represent the studied phenomenon. It reflects the researcher's ability to establish confidence in the truthfulness and accuracy of the study's findings among stakeholders, including participants, readers, and other researchers. The researchers provided rich, detailed descriptions of the participants' experiences to enhance credibility. By including direct quotes and vivid narratives in the research findings, readers could better understand the context and nuances of the teachers' experiences, enhancing the study's credibility. After analyzing the data, the researchers returned to the participants to validate the findings. This process, known as member checking, allowed participants to review the researchers' interpretations and provide feedback or corrections if necessary, thereby ensuring that the findings aligned with their experiences. Additionally, the researchers engaged in reflexivity throughout the study, critically reflecting on their own biases, assumptions, and preconceptions that may have influenced the research process. By acknowledging and addressing their own subjectivity, the researchers aimed to minimize potential biases and enhance the credibility of the study. Moreover, the researchers sought feedback from colleagues or peers familiar with phenomenological research methods. Peer de-

briefing involved discussing the research process, findings, and interpretations with other researchers to gain alternative perspectives and ensure that the study's conclusions were well-supported and robust. Also, they employed triangulation by using multiple data sources or methods to corroborate the findings. By collecting data through in-depth interviews and focus group discussions, the researchers triangulated the information, increasing the reliability and credibility of the study's conclusions. *Transferability.* Transferability refers to the extent to which the findings of the study can be applied or generalized to other contexts or populations beyond the specific participants and settings involved in the research. To enhance transferability, the researcher provided a thorough description of the research context, including information about the schools in Cluster 4, Davao City, the participants' demographic characteristics, and the specific challenges and opportunities related to technology integration in their remote area. This detailed contextual information allows readers to assess the applicability of the study findings to similar contexts. Through rich and detailed descriptions of the participants' lived experiences, including direct quotes and vivid narratives, the researchers provided readers with a deep understanding of the phenomena under investigation. By capturing the nuances and complexities of the teachers' experiences, the study aimed to facilitate the transferability of findings to other settings where similar challenges and experiences may exist. *Dependability.* To address dependability issue more directly, the researcher ensured consistency in the data collection process by following a predefined protocol for conducting interviews and focus group discussions. This protocol outlined specific procedures for selecting participants, conducting interviews, and documenting data, thereby promoting uniformity in data collection procedures across different participants and data collection sessions. Also, the researcher docu-

mented their methodological choices, decision-making processes, and any modifications made to the research design throughout the study. By providing transparent documentation of the research process, including any changes or adjustments made during the course of the study, the researcher enabled readers to assess the dependability of the findings and understand the rationale behind methodological decisions. Confirmability. Confirmability, within the realm of trustworthiness in a study, pertains to the extent to which the research findings are verifiable and not unduly influenced by the researcher's biases, perspectives, or preferences. The researcher prioritized objectivity throughout the study, striving to minimize personal biases and remain impartial when collecting and analyzing data. By adopting a neutral stance and refraining from imposing preconceived notions, the researcher ensured that the interpretations derived from the data were unbiased and free from undue influence. To validate the accuracy and interpretation of the data, the researcher employed member checking, whereby participants were invited to review and confirm the researcher's findings. This collaborative approach ensured that participants' perspectives were accurately represented and that interpretations remained faithful to their experiences. By incorporating member checking, the researcher enhanced the confirmability of the study's findings and fostered transparency in the research process. These strategies collectively ensured that the research findings were grounded in the data and free from undue influence, thereby enhancing the study's trustworthiness.

2.6. Ethical Considerations—The researcher promptly observed the protocols deemed necessary as the standard guidelines in carrying out the research study, following the study protocol assessment criteria, particularly in managing the population and data. The survey questionnaires with supporting authors were submitted for further evaluation. After

the approval from the Ethics Committee, the researcher proceeded to the next phase of the study. Informed Consent. The researcher provided detailed information about the study to potential participants, including its purpose, procedures, voluntary nature, potential risks and benefits, confidentiality measures, and their rights as participants. This information was presented in a clear and understandable manner, using language appropriate for the participant's age and educational level. For participants who were minors (under 18 years old), parental or guardian consent was obtained before they could participate in the study. Parents/guardians were provided with information about the study and asked to sign a consent form indicating their approval for their child's participation. In addition to parental consent, participants who were minors were also asked to provide their own assent to participate in the study. This involved explaining the study to them in language appropriate for their age and ensuring that they understood what participation would involve before asking them to indicate their agreement to participate. Moreover, participants were given the opportunity to ask questions about the study before deciding whether to participate. The researcher addressed any concerns or uncertainties raised by participants and provided additional clarification as needed to ensure that they had a clear understanding of what participation entailed. Lastly, participants were assured that their responses would be kept confidential and that no personally identifiable information would be disclosed in any reports or publications resulting from the study. Measures were implemented to safeguard the privacy of participants and ensure that their responses could not be linked back to them individually. Vulnerability of Research Participants. The researcher recognized that adolescents, particularly those in the senior high school level, may be considered vulnerable due to their age, developmental stage, and limited life experience. Additionally,

students from marginalized or disadvantaged backgrounds may face heightened vulnerability. The researcher implemented specific measures to protect the rights and well-being of vulnerable participants. This included providing clear and age-appropriate information about the study, obtaining informed consent/assent from both participants and their parents or guardians, and ensuring confidentiality and privacy of participants' responses. Given the sensitive nature of the topic, the researcher took extra precautions to ensure that participants were not unduly distressed or discomforted by the research process. This involved providing adequate support and resources for participants who may have found the discussions or questions emotionally challenging. He ensured that they had the freedom to choose whether or not to participate in the study. Participants were assured that their decision to participate or not would be fully respected, and that there would be no negative consequences for declining to take part. Moreover, the researcher sought approval from relevant authorities, such as school administrators and ethics review boards, to conduct the study. This ensured that the research was conducted in accordance with ethical guidelines and that adequate protections were in place for all participants, particularly vulnerable groups.

Privacy and Confidentiality. This study observed the data Privacy Act of 2012 wherein the researcher assured that the data cannot be traced back to the participants which were of information, to protect the identities of the participants. To protect the privacy of participants, the researcher ensured that all data collected were anonymized. This means that any identifying information such as names or contact details was removed or replaced with codes to prevent participants from being identified. Also, the researcher implemented strict confidentiality measures to safeguard the data collected. This included securely storing all data in password-protected electronic files or locked cabinets and restricting access only to authorized personnel. If data were collected electronically, the researcher utilized encryption methods to protect the data from unauthorized access or interception during transmission. Participants were informed of their right to withdraw from the study at any time without consequence. This ensured that participants felt comfortable participating in the study and could withdraw if they felt their privacy or confidentiality was compromised. Overall, by implementing these privacy and confidentiality measures, the researcher aimed to create a safe and trusting environment for participants to share their experiences and perspectives on multimedia instruction and English language attitude while minimizing any potential risks to their privacy or confidentiality.

Risk, Benefits and Safety. Before conducting the study, the researcher conducted a thorough risk assessment to identify any potential physical, psychological, social, or legal risks that participants might face. This included considering the sensitive nature of the topic and any potential emotional distress that participants might experience while discussing their experiences with multimedia instruction and English language attitude. Also, the researcher highlighted the potential benefits of participating in the study, such as contributing to the understanding of multimedia instruction and English language attitude, and informing future interventions and policies aimed at improving educational practices. Participants were assured that their participation would remain confidential, and their insights would be used to benefit others. Further, the researcher implemented safety measures to ensure the physical and emotional well-being of participants throughout the study. This included providing a supportive and non-judgmental environment for participants to share their experiences, as well as offering referrals to counseling or support services if needed. Furthermore, the researcher took steps to minimize any potential harm to participants, such

as ensuring that sensitive information shared during interviews or focus groups was kept confidential and anonymized. Participants were also given the opportunity to skip or avoid questions that they felt uncomfortable answering. Justice. The researcher ensured that participant selection was fair and equitable, considering factors such as age, gender, socio-economic status, and geographic location to reflect the diversity of the target population. This helped prevent the exclusion or marginalization of any group within the senior high school student community. Also, all participants had equal access to the potential benefits of the study, including the opportunity to contribute to the advancement of knowledge in the field of multimedia instruction and English language attitude. The findings of the study were intended to benefit the broader community, including policymakers and educators, by improving multimedia instruction and the English language attitude of students. In addition, the researcher took special care to protect the rights and welfare of vulnerable groups, such as students from marginalized communities or those with limited access to resources. This may have included providing additional support or accommodations to ensure their full participation in the study, such as offering transportation assistance or conducting interviews in a language they were comfortable with. Throughout the research process, the researcher ensured that all participants were treated fairly and respectfully, regardless of their background or characteristics. This involved maintaining open communication, addressing any concerns or grievances promptly, and valuing the input and perspectives of all participants equally. The researcher committed to disseminating the findings of the study in a transparent and accessible manner, ensuring that all participants had the opportunity to learn about the results and implications of the research. This helped to promote transparency and accountability, fostering trust and confidence in the research process among participants and the broader community. By implementing these measures, the researcher aimed to uphold the principle of justice in research ethics, ensuring that the study was conducted in a fair, equitable, and inclusive manner that respected the rights and dignity of all participants. Transparency. The researcher openly disclosed the research procedures and methodologies used in the study, including data collection techniques, analysis methods, and any potential limitations or biases. This transparency helped participants understand how their data would be used and interpreted, promoting trust and confidence in the research process. Throughout the research process, the researcher maintained clear and open communication with participants, addressing any questions, concerns, or misunderstandings promptly and honestly. This transparency fostered a collaborative and respectful relationship between the researcher and participants, enhancing the quality and integrity of the data collected. After completing the study, the researcher committed to sharing the findings with participants and the broader community in a transparent and accessible manner. This may have involved presenting results in plain language summaries, organizing community meetings or workshops to discuss findings, and publishing research articles in open-access journals. Qualification of the Researcher. The researcher possessed a relevant academic background and training in research methodology, English teaching, and ethics. This education provided the researcher with the necessary knowledge and skills to design and conduct the study ethically and effectively. Also, the researcher engaged in ongoing professional development activities to stay updated on ethical standards and best practices in research ethics. This may have included attending workshops, seminars, or conferences on research ethics, participating in ethics training programs, and seeking guidance from experienced mentors

or colleagues. Adequacy of Facilities. The researcher selected research sites, such as schools or community centers, that provided safe and accessible spaces for data collection activities. These spaces were conducive to conducting interviews, focus group discussions, surveys, and other data collection methods in a comfortable and private setting. The researcher ensured access to technological and audiovisual equipment, such as computers, tablets, projectors, and audio recording devices, as needed for data collection and analysis. These resources facilitated the recording, transcription, and analysis of qualitative data and the administration of surveys or questionnaires for quantitative data. The researcher created a comfortable and welcoming research environment that encouraged participation and engagement from research participants. This may have involved arranging seating arrangements, providing refreshments, and creating a relaxed atmosphere conducive to open and honest communication. The researcher ensured that research facilities were accessible to all participants, including those with disabilities or mobility limitations. This may have involved selecting research sites with wheelchair ramps, elevators, and other accessibility features, as well as providing alternative formats for data collection materials, such as large print or audio recordings, for participants with visual impairments. Community Involvement. The researcher identified key community stakeholders, such as school administrators, teachers, parents, and community leaders, and engaged them in the research process from the planning stage onwards. This may have involved holding meetings, workshops, or focus group discussions with stakeholders to discuss the research objectives, methodology, and potential implications for the community. The researcher collaborated with community stakeholders to co-design the research study, ensuring that it addresses relevant issues and aligns with the needs and priorities of the com-

munity. Stakeholders may have provided input on research questions, data collection methods, and dissemination strategies to ensure that the study is culturally appropriate and relevant to the community context. Further, the researcher involved community members in the data collection process, such as recruiting participants, conducting interviews or focus groups, and interpreting findings. This participatory approach helps to build trust and rapport with research participants and ensures that their voices are heard and valued throughout the research process. Furthermore, the researcher engaged with the community to disseminate research findings and share insights in accessible and culturally appropriate formats. This may have involved organizing community forums, workshops, or presentations to discuss the findings and implications for policy and practice.

2.7. *Data Analysis*—The following were the statistical tools utilized by the researcher in processing the gathered data: Mean. This was useful in characterizing the multimedia instruction and English learning attitude of senior high school students in Cluster 4 Public Secondary School in Davao City. Pearson-r Analysis was applied to evaluate the relationship between multimedia instruction and the English learning attitude of senior high school students in Cluster 4 Public Secondary School in Davao City. Qualitative Strand The data from the IDI and FGD were analyzed using thematic analysis. The interview was recorded so that the data and notes obtained could be analyzed to determine the emerging codes and themes. This method emphasizes pinpointing, examining, and recording patterns or themes within data. Themes are patterns across data sets that are important to the description of a phenomenon and are associated with a specific research question (Mertens, 2018). In doing the thematic analysis, the researcher first read and re-read the transcripts in order to become familiar with the data. The data were organized in order to generate initial

codes. Codes reduced ideas into smaller chunks of meaning. Codes were examined and grouped together according to themes. Themes were formed and reviewed, modified, and developed. Themes were coherent and distinctive from each other. Lastly, the identified themes were defined to identify their meaning (Creswell, 2017).

2.7.1. Sequence, Emphasis, and Mixing Procedures—A sequential collection of quantitative and qualitative components was employed in this study. However, the data integration happens during the analysis and interpretation phase. *Sequence.* A sequential-explanatory mixed-method design was used in this study. This means that the data gathered in the quantitative strand was further verified in the qualitative strand to explain the salient results of the survey. For the quantitative strand, the researcher collected the data online through adapted questionnaires and interviews of the senior high school students in Cluster 4 public secondary schools in Davao City with a validated interview guide for the qualitative phase. This means that the survey and interview were conducted separately and simultaneously. The qualitative data verified the quantitative data for cross-validation or confirmation of findings. With this method, the qualitative results determine the depth of the study's quantitative findings. *Emphasis.* The quantitative data were given more emphasis in the study because they use empirical tools and provide substantive support for the qualitative findings. The findings were integrated during the interpretation phase of the study. The sequential-explanatory design framework shows two strands with the data collection and analysis from the quantitative and qualitative strands. By mixing both quantitative and qualitative research and data, the researcher gained an in-depth understanding after corroboration, while offsetting the weaknesses inherent in using each approach by itself. *Mixing Procedures.* The design required a substantial length of time to complete all data collection given

the two separate phases. The main purpose of mixing quantitative and qualitative data is for the qualitative data to help explain the quantitative data. Thus, quantitative and qualitative data were connected. Mixed methodologies were observed in the formulation of the purpose, research questions, and integration of data in the findings and interpretation of the study. A data integration technique was applied to establish either the complementation of quantitative and qualitative data or the sequential connection between these two data sets. The qualitative data either confirms or contrasts the quantitative findings. Either of these, citations of the previous studies, explained the results. In addition, the specific research questions of the study served as a guide in the interpretation of the results. It is shown in Figure 2, the systematic procedure of the study. It demonstrates the use of a sequential-explanatory mixed methods design, where quantitative and qualitative data were corroborated to determine the relationship between multimedia instruction and English language attitude of senior high school students. Then, after giving adequate time, the responses to the survey questionnaires were conducted, which were encoded and analyzed. Concurrently, IDI and FGD were conducted in the selected secondary public schools. In the quantitative strand, the responses of the participants using the validated survey questionnaire were analyzed using computer applications, and the answers of the participants were numeric data as the output. In addition, in analyzing the quantitative data, appropriate statistical tools were used, including Mean and Pearson-r Analysis. After analysis, the data was presented according to the sequence of the research problems. In the qualitative data strand, the researcher purposefully selected the participants for the IDI and FGD. The schedule of the IDI and FGD was set at the convenience of the participants. Every detail of the responses was taken into consideration, but those that were not relevant to the study were

not reflected. In addition, the interview proceedings were recorded with the consent of the participants. Thematic analysis was employed, consisting of six phases, starting with the researcher transcribing, reading, and re-reading the data, and then initial codes or features of the data were created. The next phase was search-

ing for the themes and collating the codes. As to the integration of the quantitative and qualitative results phases, the researcher interpreted and explained the quantitative and qualitative results to arrive at a very substantial discussion, implications, and recommendations.

3. Results and Discussion

This reflects the presentation, analysis, and interpretation of findings. Specifically, this chapter reveals both quantitative and qualitative data relevant to addressing the research questions formulated in Chapter 1. The tabulated quantitative findings are presented in Tables 1-3, while qualitative findings are presented in Tables 4-5.

3.1. *Multimedia Instruction in Cluster 4 Secondary Public Schools in Davao City*—Table 1 shows the summary of multimedia instruction in Cluster 4 Public Secondary Schools in Davao City. It shows that the overall mean of multimedia instruction is 3.23 which is described as moderately extensive, and interpreted as sometimes observed. This shows that students can effectively use multimedia instruction as part

of their learning strategy. They can integrate multimedia resources with other study methods to achieve better learning outcomes. This aligns with Peeples et al. (2019) assertion that multimedia instruction stimulates active learning by prompting students to engage with content via multimedia platforms. It empowers teachers to create interactive tasks, simulations, and multimedia presentations, thereby nurturing student involvement and active participation in learning.

Table 1. Multimedia Instruction in Cluster 4 Secondary Public Schools in Davao City

Indicators	Mean	Descriptive Equivalent
Learning Outcomes	3.19	Moderately Extensive
Engagement	3.28	Moderately Extensive
Learner Satisfaction	3.22	Moderately Extensive
Overall	3.23	Moderately Extensive

Meanwhile, the respondents assessed multimedia instruction in terms of learning outcomes as moderately extensive with a category mean of 3.19, interpreted as sometimes observed by the senior high school students. The mean rating of the different items, as shown in Appendix A, ranges from 2.61 to 3.78. On one hand, the item “The multimedia components effectively supported my learning process” (refer to Ap-

pendix A) has a mean rating of 2.61, described as moderately extensive and interpreted as sometimes observed by the respondents. On the other hand, the item “Thinking that the multimedia instruction was a valuable addition to traditional teaching methods” (refer to Appendix A) reflects a mean of 3.78 described as extensive and interpreted as oftentimes observed by the respondents. This indicates that multimedia in-

struction tends to grab learners' attention and involve them more effectively compared to traditional text-based materials. This coincides with Hadi et al.'s (2022) perspective that multimedia instruction frequently captivates learners' attention and involves them more effectively than conventional text-based resources. Such heightened engagement can benefit cognitive outcomes, promoting a deeper grasp and retention of the material.

Multimedia instruction in terms of engagement got a moderately extensive rating with a category mean of 3.28, which means that this domain is sometimes observed by junior high school students in cluster 4 public secondary schools in Davao City. The mean rating of the different items ranges from 2.56 to 3.92. The item "Feeling motivated to participate and learn from the multimedia instruction" (refer to Appendix A) reflects a mean rating of 2.56, described as less extensive and interpreted as an item seldom observed. Meanwhile, the item "The interactive elements in the multimedia-enhanced my engagement" (refer to Appendix A) shows a rating of 3.92, described as extensive and interpreted as an item oftentimes observed by the respondents. This shows that multimedia instruction can ignite and sustain students' interest in the subject matter. This suggests that multimedia instruction not only captures attention but also enhances ongoing engagement and learning satisfaction. The result aligns with Draus's (2020) perspective that multimedia instruction can ignite and sustain students' interest in the subject. For students who show moderate engagement, utilizing multimedia materials can help maintain their curiosity and motivation to learn, thereby making the educational experience more enjoyable and effective. This suggests that multimedia instruction not only captures initial interest but also keeps students engaged and motivated throughout the learning process. Lastly, multimedia instruction in terms of learner satisfaction got a moderately exten-

sive rating with a category mean of 3.22 which means that this domain is sometimes observed by the junior high school students in Cluster 4 Public Secondary Schools in Davao City. The mean rating of the different items ranges from 3.01 to 3.42. The item "Believing that multimedia instruction improved my learning experience compared to traditional methods" (refer to Appendix A) reflects a mean rating of 3.01 described as moderately extensive and interpreted as item sometimes observed. Meanwhile, the item "The multimedia instruction provided valuable insights into the subject matter" (refer to Appendix A) shows a rating of 3.42, described as extensive and interpreted as item oftentimes observed by the respondents. This suggests that while students see some value in the material, there is room for improvement. Instructors and course designers should aim to make the content more directly applicable to students' needs and interests to enhance its perceived relevance and usefulness. The findings align with Bi et al.'s (2020) notion that moderate satisfaction implies students find the content partially relevant and beneficial. This indicates a need for improvement, and instructors and course designers should work towards making the content more directly aligned with students' needs and interests.

3.2. *English Learning Attitude of Senior High School Students in Cluster 4 Public Secondary Schools in Davao City*—Table 2 summarizes the English learning attitude of senior high school students in Cluster 4 Public Secondary Schools in Davao City. As shown in the table, the English learning attitude of senior high school students obtained an overall mean score of 3.69 with a descriptive rating of extensive and is interpreted as often manifested by the respondents. This means that the students' overall disposition, beliefs, and feelings towards the process of learning the English language are often manifested by the respondents. Teachers play a crucial role in fostering intrinsic

motivation by designing engaging and meaningful learning experiences. When students find activities interesting and relevant to their lives, they are more likely to be motivated to learn. This aligns with the perspective presented by Yurdagül and Öz (2018), which suggests that a favorable learning attitude promotes intrinsic motivation, characterized by genuine interest, curiosity, and enjoyment in language learning. To nurture students’ intrinsic motivation, educators can design learning activities that are captivating, meaningful, and culturally resonant, thereby tapping into students’ individual interests and passions.

Table 2. English Learning Attitude of Senior High School Students in Cluster 4 Public Secondary Schools in Davao City

Indicators	Mean	Descriptive Equivalent
Interest in Learning	3.69	Extensive
Sense of Belonging	3.63	Extensive
Self-Concept in Learning	3.56	Extensive
Control Strategies	3.87	Extensive
Overall	3.69	Extensive

Meanwhile, English learning attitude of senior high school students in terms of interest in learning was assessed by the respondents as extensive with a category mean of 3.69, interpreted as oftentimes manifested by the senior high school students. The mean rating of the different items, as shown in Appendix A, ranges from 3.23 to 4.01. On one hand, the item “Believing that what I learn in English is more important than getting a passing grade” (refer to Appendix A) has a mean rating of 3.23, described as moderately extensive and interpreted as sometimes manifested by the students. On the other hand, the item “Taking time to learn related previous subjects well in order to learn English without difficulty” (refer to Appendix A) reflects a mean of 4.01 described as extensive and interpreted as oftentimes manifested by the senior high school students. Engaging language learning experiences also foster cognitive flexibility, enabling students to adapt to new information and situations. This skill is essential for language learning as it allows students to navigate various linguistic contexts and comprehend diverse language structures. This aligns

with Lena’s (2022) perspective, indicating that compelling and captivating language learning activities stimulate students to engage in critical thinking and adjust to novel information. This cognitive adaptability is advantageous not just for language acquisition but also for broader cognitive growth. English learning attitude of senior high school students in terms of sense of belonging was assessed by the respondents as moderately extensive with a category mean of 3.63, interpreted as oftentimes manifested by the senior high school students. The mean rating of the different items, as shown in Appendix A, ranges from 3.02 to 3.98. On one hand, the item “Having a lot of friends” (refer to Appendix A) has a mean rating of 3.02, described as moderately extensive and interpreted as sometimes manifested by the students. On the other hand, the item “Making friends easily” (refer to Appendix A) reflects a mean of 3.98 described as extensive and interpreted as oftentimes manifested by the senior high school students. When students feel accepted and valued for who they are, they are more likely to engage actively in the learning process and develop a sense of be-

longing. This aligns with the perspective of Harris and Orth (2019), who argue that establishing a nurturing and inclusive classroom atmosphere, where students can forge meaningful social bonds, is essential for cultivating a feeling of belonging. English learning attitude of senior high school students in terms of self-concept in learning was assessed by the respondents as moderately extensive with a category mean of 3.56, interpreted as oftentimes manifested by the senior high school students. The mean rating of the different items, as shown in Appendix A, ranges from 3.12 to 4.01. On the one hand, the item “Thinking I am a good English student” (refer to Appendix A) has a mean rating of 3.12, described as moderately extensive and interpreted as sometimes manifested by the students. On the other hand, the item “My work in English class is good” (refer to Appendix A) reflects a mean of 4.01 described as extensive and interpreted as oftentimes manifested by the senior high school students. A strong self-concept contributes to students’ self-confidence in their English language abilities. Believing in their capacity to succeed boosts students’ willingness to take on challenges and persist in their efforts to improve. This aligns with Wirriawan’s (2023) discovery that a strong self-concept in learning correlates with increased motivation and self-assurance. Students have confidence in their capacity to learn and enhance their English proficiency, which encourages enthusiastic

3.3. Significant Relationship Between Multimedia Instruction and English Learning Attitude of Senior High School Students in Cluster 4 Public Secondary Schools in Davao City—The results of the analysis of the relationship between multimedia instruction and the English learning attitude of senior high school students in Cluster 4 Public Secondary Schools in Davao City are presented. Bivariate correlation analysis using Pearson Product Moment Correlation was utilized to determine the relationship be-

participation in learning endeavors. Lastly, the English learning attitude of senior high school students in terms of control strategies was assessed by the respondents as moderately extensive with a category mean of 3.87, interpreted as oftentimes manifested by the senior high school students. The mean rating of the different items, as shown in Appendix A, ranges from 3.55 to 4.18. On the one hand, the item “Trying to use strategies that have worked in the past” (refer to Appendix A) has a mean rating of 3.55, described as extensive and interpreted as oftentimes manifested by the students. On the other hand, the item “Knowing what kind of information is most important to learn in English” (refer to Appendix A) reflects a mean of 4.18 described as extensive and interpreted as oftentimes manifested by the senior high school students. When students have control over their learning process, they feel more ownership and responsibility for their progress, leading to increased engagement and commitment. This aligns with Poth’s (2019) perspective, which suggests that control strategies enable learners to enhance their learning experience, resulting in improved efficiency and effectiveness in acquiring language skills. Through the use of metacognitive techniques like setting goals and self-evaluation, learners can track their advancement and make well-informed choices regarding their learning methods, ultimately maximizing the outcomes of their learning efforts.

tween the variables mentioned. Table 3 shows that multimedia instruction has a significant positive relationship with the English learning attitude of senior high school students with a p-value of .000 that is less than .05 level of significance (two-tailed) ($r = .775$, $p < 0.05$). It means that as the extent of multimedia instruction changes, the extent of English learning attitude of senior high school students also significantly changes. Moreover, the table also shows that the multimedia instruction in terms of learn-

ing outcomes; engagement; and learner satisfaction are significantly correlated with English learning attitude of senior high school students as evident on the correlation coefficient values of 0.605, 0.568, and 0.712. This leads to rejecting the null hypothesis of no significant relationship between multicultural instruction and the English learning attitude of senior high school students in Cluster 4 Public Secondary Schools in Davao City. This shows that multimedia instruction capitalizes on the use of visually stimulating content to engage students. Visual elements such as graphics, animations, and videos can enhance comprehension and retention by providing additional context and reinforcement. The findings support Aljazzaf’s (2020) assertion that multimedia instruction frequently employs visually stimulating and interactive materials,

effectively attracting and sustaining students’ interest and involvement. By presenting learning materials in various formats, students are inclined to perceive them as engaging and enjoyable, consequently nurturing a favorable outlook on English learning. Moreover, this indicates that multimedia resources offer students the freedom to tailor their learning experience to suit their individual schedules and preferences. The accessibility of multimedia materials empowers students to take control of their learning process, promoting autonomy and self-directed learning. The outcome aligns with Rahimi and Allahyari’s (2019) perspective, suggesting that multimedia resources allow students to learn at their own convenience, regardless of time or location.

Table 3. Significant Relationship Between Multimedia Instruction and English Learning Attitude of Senior High School Students in Cluster 4 Public Secondary Schools in Davao City

Multicultural Instruction	English Learning Attitude	r-value	p-value
Learning Outcomes		0.605*	0.000
Engagement		0.568*	0.000
Learner Satisfaction		0.712*	0.000
Overall Multicultural Instruction		0.775*	0.000

Note: *Significant at $p < 0.05$

3.4. *Standpoints of the Participants on the Quantitative Results Regarding the Extents of Multimedia Instruction and English Learning Attitude of Senior High School Students*—Table 3 presents the standpoints of the participants on the quantitative results regarding the moderately extensive rating of multimedia instruction and the extensive rating of the English language attitude of the senior high school students. From the standpoints of the participants on the quantitative results regarding the moderately extensive rating of multimedia instruction, there were four emerging codes that were identified,

namely: Limited access to technology, resistance to change, limited integration into lesson plans, and socioeconomic factors.

3.4.1. *Limited Access to Technology*—Limited access to technology creates inequalities among students. Those with better access at home or through personal devices have an advantage in accessing multimedia-rich educational resources, while others are left at a disadvantage. This statement indicates that the effectiveness of multimedia instruction is hindered by students’ unequal access to necessary devices. The lack of personal gadgets prevents

some students from fully engaging with multimedia educational tools, resulting in a moderate overall rating for multimedia instruction. This highlights the issue of insufficient classroom equipment, such as computers and projectors, which restricts the availability and effectiveness of multimedia instruction. The lack of adequate resources means that only a portion of students can benefit, leading to a moderate rating for the overall instructional approach. This response points to a systemic issue where entire classes are unable to utilize multimedia tools due to a shortage of necessary equipment. The absence of such resources across multiple classes results in a less comprehensive integration of multimedia instruction, contributing to its moderate evaluation. This interpretation emphasizes that the continuity and quality of multimedia instruction are disrupted by the lack of essential technological tools. Inadequate availability of projectors and computers impairs students' ability to follow and participate in multimedia presentations, thus only achieving a moderate effectiveness level. Overall, the result indicates that a deficiency in technological infrastructure within educational settings hampers access to technology. Many schools lack essential resources like computers, projectors, or interactive whiteboards, impeding the successful implementation of multimedia instruction. Abdulrahman et al. (2020) argue that the absence of technological infrastructure within educational institutions contributes to restricted access to technology. Many schools lack essential equipment like computers, projectors, or interactive whiteboards, hindering the effective implementation of multimedia instruction.

3.4.2. Resistance to Change—The resistance to change can lead to a stagnation of teaching methods, with educators sticking to traditional approaches. This can hinder the evolution of pedagogy and limit the use of innovative and effective multimedia resources. This statement indicates that discomfort with using

technological devices is a significant barrier for students. Their preference for traditional, non-technological methods results in a moderate effectiveness rating for multimedia instruction, as many students are not fully engaging with or benefiting from it. This response suggests that resistance to change is a key factor in the moderate rating of multimedia instruction. Students' attachment to familiar teaching methods inhibits their acceptance and effective use of multimedia tools, thus limiting the overall impact and success of multimedia instruction in the classroom. This interpretation emphasizes that students' resistance to change, particularly towards incorporating technology into their learning environment, leads to a moderate evaluation of multimedia instruction. Their preference for traditional classes without technology hinders the widespread adoption and effectiveness of multimedia teaching methods. This statement highlights that a significant portion of students' reluctance towards multimedia instruction stems from their dislike of change. Their preference for conventional teaching methods over multimedia approaches results in a moderate assessment, as the resistance to new instructional technologies prevents full integration and utilization in the classroom. This shows that discomfort such as unfamiliarity and inadequate training may result in hesitancy to embrace new tools and incorporate them into their curriculum planning. The result is in agreement with MI's et al. (2021) proposition that many teachers may feel uncomfortable with new technology due to a lack of familiarity and training. Traditional teaching methods are often deeply ingrained, and shifting to multimedia instruction requires a significant change in their teaching approach. This discomfort can lead to reluctance in adopting new tools and integrating them into their lesson plans.

3.4.3. Limited Integration into Lesson Plans—The limited integration of multimedia means students miss out on the educational ben-

efits that multimedia resources can offer, such as visualizations, interactive simulations, and dynamic content that can enhance understanding. When some teachers integrate multimedia while others do not, students may have inconsistent learning experiences. This can lead to disparities in the quality and effectiveness of instruction. This statement suggests that the moderate effectiveness of multimedia instruction is due to some teachers' lack of knowledge or skills in integrating technology into their teaching methods. The student expresses a desire for more consistent use of technology across all classes, indicating that the perceived gap in teachers' technological competencies is a significant factor in the moderate rating. This response highlights that teachers' reluctance or aversion to using technology is a major reason for the moderate rating of multimedia instruction. The student's observation points to a resistance among teachers to adopt technological tools, which affects the overall implementation and effectiveness of multimedia in the classroom. This interpretation underscores that a resistance to change among teachers contributes to the moderate rating of multimedia instruction. The student's comment indicates that teachers' preference for traditional methods and their unwillingness to embrace new technological approaches are key factors limiting the effectiveness and widespread use of multimedia instruction. This statement reiterates that the moderate level of multimedia instruction is partly due to some teachers' lack of skills or knowledge in integrating technology effectively. The student suggests that having technology integrated into all classes would improve the situation, emphasizing that inconsistent technological integration is a major factor in the moderate evaluation of multimedia instruction. Overall, this indicates that educators who possess lower levels of technological proficiency may encounter obstacles in devising and executing lesson plans infused with multimedia elements. This aligns

with the concept proposed by Janssen and colleagues (2019) that educators who feel less at ease with technology may encounter difficulties in creating and executing lesson plans rich in multimedia content. Such discrepancies could result in uneven utilization of multimedia resources across various classes.

3.4.4. Socioeconomic Factors—Socioeconomic disparities can lead to a digital divide, where students from lower-income backgrounds may have limited access to the necessary technology and devices for multimedia instruction. This can result in unequal educational opportunities. This statement highlights that economic difficulties significantly limit the opportunities for multimedia instruction. Students' inability to afford necessary gadgets or access the internet results in a moderate effectiveness rating for multimedia instruction, as these barriers prevent equitable participation and utilization of technological resources in the classroom. This response indicates that economic hardship among students creates technological access disparities. The lack of laptops or tablets among some classmates contributes to the moderate rating of multimedia instruction, as not all students can equally benefit from technological tools, leading to an uneven educational experience. This interpretation emphasizes that the lack of affordability of gadgets and internet connections is a primary reason for the absence of multimedia instruction in many classes. The student suggests that providing access to technology for all students would improve the situation, highlighting that socioeconomic barriers are a key factor in the moderate assessment of multimedia instruction. This statement underscores that socioeconomic disparities among students result in unequal access to technology, which in turn affects the overall effectiveness of multimedia instruction. Economic hardship limits students' ability to engage with multimedia resources, leading to a moderate evaluation as not all students can fully participate in technology-

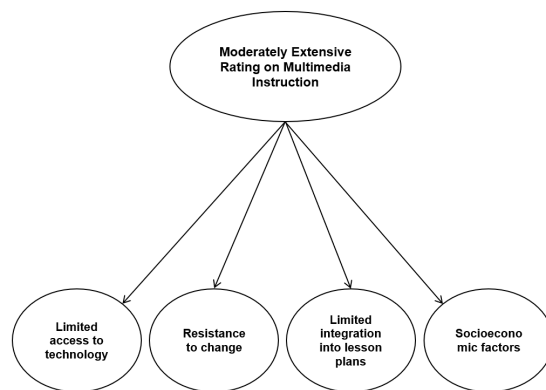


Fig. 2. Standpoints of the Participants on the Quantitative Results Regarding the Moderately Extensive Rating Multimedia Instruction enhanced learning activities.

This finding suggests that the presents a considerable obstacle for many families. It implies that economic constraints hinder access to multimedia learning tools, limiting the ability of students to fully engage with digital resources.

3.5. *Standpoints of the Participants on the Quantitative Results Regarding the Moderately Extensive Rating on English Learning Attitude of Senior High School Students*—On the standpoints of the participants on the quantitative results regarding the moderately extensive rating on English learning attitude of senior high school students, there were four emerging codes that identified namely: Effective teaching methods; personal goals and aspirations; access to information; and recognition and rewards.

3.5.1. *Effective Teaching Methods*—Effective teaching methods can have a significant impact on fostering a high level of English learning attitude among senior high school students. Effective teaching methods make English language learning more engaging and interactive, capturing students’ interest and enthusiasm. This engagement can lead to a positive attitude toward learning. The statement underscores the pivotal role of effective teaching methods in shaping students’ attitudes towards learning English. It suggests that when teachers employ

The outcome aligns with the findings of Saw et al. (2018), indicating that not all families have access to reliable internet connectivity, which may be either unavailable or financially inaccessible.

strategies that enhance learning, students become more eager to engage in their studies. This implies that the quality of teaching directly influences students’ enthusiasm for learning English. This statement highlights the importance of innovative teaching approaches in fostering enjoyment and interest in studying English. It suggests that when teachers introduce new and engaging methods, students are more likely to find the learning process enjoyable. This implies that dynamic teaching methods can stimulate students’ interest and enthusiasm for English learning. The statement emphasizes the impact of active and creative teaching on student engagement and motivation. It suggests that when teachers are dynamic and inventive in their instructional approaches, students become more involved in the learning process. This implies that interactive and stimulating teaching methods can cultivate a positive attitude towards English learning among students. The statement underscores the significance of teacher-student rapport and effective teaching

methods in motivating students to study English. It suggests that when teachers establish meaningful connections with students and employ effective teaching strategies, students are motivated to invest in their studies. This implies that a supportive learning environment, coupled with well-executed teaching methods, can optimize students' learning experiences and foster a positive attitude towards English learning. The result emphasize the importance of using teaching methods that prioritize interaction and put students at the center of the learning process. By implementing such techniques, students are likely to develop a more positive outlook on learning English. Activities such as group discussions, role-playing, and working with peers not only promote active engagement but also stimulate critical thinking and improve communication abilities. The outcome aligns with Lamatokan's (2018) perspective, indicating that employing effective teaching techniques focusing on interactivity and student-centered approaches can enhance students' positive attitudes toward English learning. Engaging in activities like group discussions, role-playing, and peer collaboration encourages active participation, critical thinking, and the enhancement of communication skills, thus fostering a favorable learning environment.

3.5.2. Personal Goals and Aspirations—Personal goals and aspirations can have a profound impact on fostering a high level of English learning attitude among senior high school students. When students have specific goals and aspirations related to English language learning, it can influence their motivation, enthusiasm, and commitment to the language. The statement highlights the role of personal strengths and aspirations in driving English language learning. It suggests that students are motivated to excel in English to support their academic and career goals. This implies that aligning language learning with personal aspirations can enhance motivation and foster a positive attitude towards

English learning. The second statement emphasizes the significance of personal goals in motivating students to study English. It suggests that setting specific goals, whether academic or life-related, fuels determination and commitment to language learning. This implies that having clear objectives can enhance students' motivation and perseverance in mastering English. The statement underscores the link between personal goals and motivation in English learning. It suggests that students are driven to improve their English skills to excel in their professional endeavors and enhance communication abilities. This implies that the pursuit of career-related objectives can serve as a powerful motivator for English language acquisition. The statement underscores the impact of personal goals on students' attitudes towards learning English. It suggests that aspirations such as graduation and career advancement drive students' dedication to mastering English. This implies that aligning language learning with broader life goals can contribute to a positive mindset and commitment to English language acquisition. This suggests that aligning language learning activities, materials, and tasks with students' personal goals and aspirations, contributes to fostering a positive attitude toward learning English at an advanced level. When language teachers customize learning experiences to resonate with students' individual motivations and aspirations, it enhances their engagement and investment in the learning process. This supports Gheriani's (2019) discovery that language educators have the ability to tailor language learning activities, materials, and tasks to mirror the individual goals and ambitions of students.

3.5.3. Access to Information—The implications of access to information on students' English learning attitude are diverse and contribute to a more positive, motivated, and engaged approach to language learning, as students recognize the value and potential for personal and academic growth associated with English pro-

iciency. The first statement suggests that the ability to access information through the internet and library resources significantly enhances English learning. It implies that the availability of articles and videos online makes studying more convenient and effective, contributing to a positive attitude towards learning English. The second statement emphasizes the importance of online information in improving English proficiency. It indicates that having access to a wide range of resources, such as e-books and educational websites, provides students with ample material to study, which helps them learn and practice English more effectively. This implies that a wealth of online resources can boost students' enthusiasm for English learning. This statement highlights the value of online learning resources in enhancing English language skills. It suggests that access to various digital materials allows students to explore different techniques and strategies, thereby improving their skills. This implies that diverse online resources can contribute to a more comprehensive and motivated approach to learning English. The fourth statement underscores the role of educational apps and websites in making English learning more interactive and engaging. It implies that digital tools not only provide useful resources but also create an engaging learning experience, which can significantly enhance students' motivation and positive attitude towards learning English. Overall, this suggests that students who exhibit a strong positive attitude towards learning English highly prioritize having access to top-tier educational resources and materials in the language. They understand that being proficient in English not only grants them access to a wide range of educational opportunities but also enhances their prospects for scholarships, studying abroad, participating in online courses, and engaging in international collaborations. This echoes the discoveries of Putra et al. (2020), indicating that students who possess a strong enthusiasm for learning English highly

appreciate their access to premium educational resources, courses, lectures, tutorials, and study materials in the language. They acknowledge that mastering English unlocks numerous educational prospects, such as scholarships, opportunities for studying abroad, online courses, and international partnerships.

3.5.4. *Recognition and Awards*—Recognition and awards in the context of English learning can have a profound impact on fostering a high level of attitude among senior high school students. The implications of receiving recognition and awards for their English language skills are significant and can positively influence students' motivation, engagement, and attitude toward English learning. The first statement suggests that recognition and awards serve as powerful motivators for English learning. It implies that receiving recognition boosts students' motivation to excel further in their studies, as they strive to attain more awards. This implies that acknowledgment of achievement fosters a positive attitude towards English learning by incentivizing students to put in extra effort. The second statement highlights the positive impact of recognition on students' self-confidence and motivation in English learning. It implies that when students receive recognition for their efforts, they feel more confident in their abilities and are thus motivated to continue studying diligently. This suggests that recognition acts as a reinforcing factor that strengthens students' determination to succeed in learning English. The third statement underscores the motivational influence of awards on students' English learning. It suggests that the presence of awards inspires students to strive for excellence, as they observe the recognition given to their peers. This implies that the visibility of awards creates a competitive and motivating environment that encourages students to actively engage in English learning. The fourth statement emphasizes the importance of acknowledging achievements in improving students' attitudes towards learn-

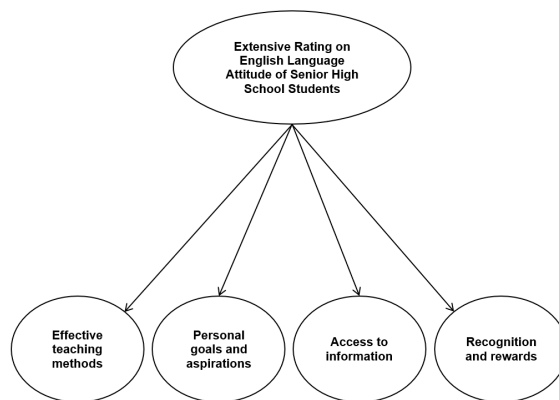


Fig. 3. Standpoints of the Participants on the Quantitative Results Regarding the Extensive Rating on English Language Attitude of Senior High School Students

ing English. It suggests that the existence of awards incentivizes students to invest effort and enhance their skills in the subject. This implies that recognition of achievement plays a significant role in fostering a positive mindset and commitment to English language acquisition among students.

This shows that language teachers have the ability to utilize recognition and rewards as effective tools for encouraging and motivating students to actively participate in English learning activities. By implementing positive reinforcement strategies, such as acknowledging students’ efforts, praising their achievements, and offering rewards, teachers can incentivize students to engage more actively in class dis-

cussions, complete assignments, and ultimately accomplish their learning goals. This corroborates with Saraswati’s (2020) view that language teachers can use recognition and rewards as positive reinforcement strategies to motivate and incentivize students to actively engage in language learning activities, participate in class discussions, complete assignments, and achieve learning objectives.

3.6. *Standpoints of the Participants on the Significant Relationship Between Multimedia Instruction and English Learning Attitude of Senior High School Students*—Figure 4 presents the standpoints of the participants on the quantitative results regarding the significant relationship between multimedia instruction and English learning attitude of senior high school students. There were three emerging codes that identified namely: Increased motivation; alignment with technology skills; and self-directed learning.

engagement, persistence, and overall positive attitude toward English. Motivated students are willing to invest greater effort in their English studies. They are more likely to dedicate time to practice, study, and improve, leading to a more positive attitude. This statement highlights that multimedia instruction, through videos and animations, enhances the engagement and enjoyment of learning English. The dynamic content captures students’ interest, making lessons more comprehensible and reducing boredom. The use of interactive multimedia activities, such as quizzes and games, simplifies the learning process and improves topic comprehension. This engagement boosts students’ motivation

3.6.1. *Increased Motivation*—Increased motivation serves as a driving force behind their language learning efforts, enhancing their en-

to study English by making the learning experience more interactive and enjoyable. Multimedia resources offer diverse learning methods that cater to various study habits. E-books, online articles, and educational apps enhance vocabulary acquisition and overall English proficiency by providing practical tools for learning. This shows that educational videos simplify the understanding of complex concepts and make learning more engaging compared to traditional lectures. This increased engagement leads to higher interest and motivation in learning English. Overall, when students find the learning process enjoyable and engaging due to multimedia instruction, their overall attitude towards learning English improves. They are more likely to look forward to English classes and view them positively. This aligns with Subaidi bin Abdul Samat and Aziz's (2020) perspective that multimedia instruction typically includes videos, animations, interactive quizzes, and games, which capture students' attention more effectively than traditional teaching methods. When students are engaged, they are more likely to be motivated to actively participate in the learning process.

*3.6.2. Alignment With Technology Skills—*The implications of alignment with technology skills in multimedia instruction underscore the importance of technology in creating a positive and engaging learning environment. The integration of technology skills enhances the learning experience, fosters self-directed learning, and prepares students for the demands of the digital age, all of which contribute to a positive attitude toward English learning. Using multimedia tools for presentations fosters creativity and enhances technical skills. This practice also boosts students' confidence in presenting in English, thereby improving their communication skills and self-assurance. Online forums and discussion boards facilitate the improvement of communication and technical skills. The interactivity of these platforms makes studying more

enjoyable, contributing to a positive attitude towards English learning. Creating English vlogs with video editing software enhances technical skills and fluency in English. This practical application of language skills through multimedia fosters both technological proficiency and language confidence. The use of online dictionaries and thesauruses aids vocabulary acquisition and improves technological skills. This dual benefit enhances the overall effectiveness and efficiency of English language learning. In general, when multimedia resources are integrated into their learning, it leverages their existing tech skills, making the learning process more intuitive and less intimidating. This aligns with Ogay's (2020) perspective that utilizing multimedia resources like videos, podcasts, and interactive simulations matches students' technological skills and preferences. These resources offer diverse learning experiences that accommodate different learning styles, making the process of acquiring English skills more engaging and enjoyable.

*3.6.3. Self-Directed Learning—*Self-directed learning in the context of multimedia instruction emphasizes the role of autonomy and customization in creating a positive and self-sustaining learning experience. The alignment with personal goals, skill development, and intrinsic motivation enhances the learning attitude of senior high school students and fosters a long-term interest in English. Planning study schedules with online calendars and reminders promotes disciplined study habits and effective use of multimedia resources. This organization supports a more serious and structured approach to English learning. Downloading educational podcasts and videos enhances listening skills and encourages self-directed learning. The motivational aspect of multimedia materials fosters independent study and continuous improvement in English. Subscribing to English learning YouTube channels provides accessible and comprehensive lessons on grammar and pro-

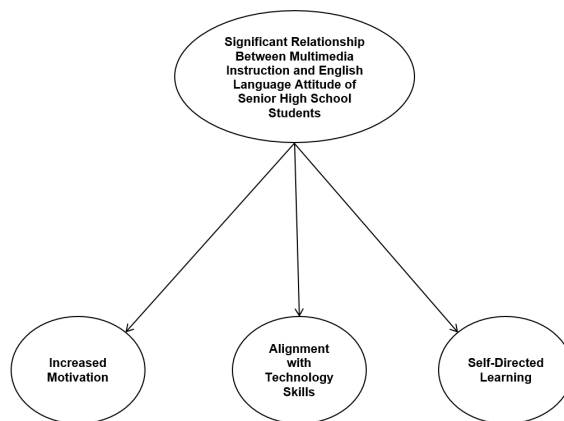


Fig. 4. Standpoints of the Participants on the Quantitative Results Regarding the Authentic Performance Appraisal Practices of Beginning and Experienced English Teachers

nunciation. This independent study approach, supported by multimedia, improves students’ language skills and understanding. Language learning apps offer flexible and engaging methods for practicing English. The interactive nature of these multimedia tools adapts to individual learning styles, enhancing the overall learning experience and effectiveness. Different students have different learning styles, such as visual, auditory, or kinesthetic. Multimedia instruction accommodates these varied prefer-

ences by offering resources in multiple formats. This ensures that each student can access materials that resonate with their preferred mode of learning, fostering a positive attitude towards English learning. The outcome reinforces Rai’s (2022) notion that multimedia instruction offers a wide array of educational resources, including e-books, podcasts, educational apps, and online articles. This assortment allows students to delve into various materials that align with their individual learning preferences and interests.

4. Conclusions and Recommendations

This part of the paper presents the conclusion and recommendation of the researcher. The discussion is supported by the literature presented in the first chapters and the conclusion is in accordance with statements of the problem presented in this study.

4.1. Findings—This study aimed to determine the significant relationship between multimedia instruction and English learning attitude of senior high school students in Cluster 4 Public Secondary Schools in Davao City using mixed methods specifically the sequential-explanatory design wherein adapted survey questionnaires will be used in the quantitative phase and through in-depth interview (IDI) and focus group discussion (FGD) in the qualitative phase. On one hand, in the quantitative phase of

the study, adapted survey questionnaires were used to gather data from the teachers to determine extents of multimedia instruction and English learning attitude of senior high school students in Cluster 4 Public Secondary Schools in Davao City. For quantitative strand, the researcher made use of modified and enhanced adapted survey questionnaires which was pilot tested in a nearby school to ensure high reliability and internal consistency of the items in the instrument, while, semi-structured interview

guide was used in qualitative strand.

Based on the results the summary of the findings were the following: Multimedia instruction in Cluster 4 Public Secondary Schools in Davao City got an overall mean of 3.23 with extensive descriptive rating. Also, multimedia instruction in terms of learning outcomes; engagement; and learner satisfaction obtained the mean scores of 3.19, 3.28, and 3.22, respectively. English learning attitude of senior high school students in Cluster 4 Public Secondary Schools in Davao City has an overall mean of 3.69 with an extensive descriptive rating. Also, English learning attitude of senior high school students in terms of interest in learning; sense of belonging; self-concept in learning; and control strategies obtained the mean scores 3.69, 3.63, 3.56, and 3.87, respectively. Multimedia instruction has a significant positive relationship with the English learning attitude of senior high school students in Cluster 4 Public Secondary Schools in Davao City with a p-value of .000 that is less than .05 level of significance (two-tailed) ($r = .775$, $p < 0.05$). This means that as the multimedia instruction changes, English learning attitude of senior high school students also changes significantly. On the standpoints of the participants on the quantitative results regarding the moderately extensive rating on multimedia instruction, the four emerging codes are as follows: limited access to technology; resistance to change; limited integration into lesson plans; and socioeconomic factors. From the standpoints of the participants on the quantitative results regarding the extensive rating of English learning attitude of senior high school students, the four emerging codes are as follows: effective teaching methods, personal goals and aspirations, access to information, and recognition and rewards. From the standpoints of the participants on the quantitative results regarding the significant relationship between multimedia instruction and the English learning attitude of senior high school students in Cluster 5 Pub-

lic Secondary Schools in Davao City, the three emerging codes are as follows: increased motivation, alignment with technology skills, and self-directed learning.

4.2. *Conclusions*—Based on the findings of this study and within the limitations and restrictions (such as survey questionnaire and number of respondents), several conclusions are generated: Multimedia instruction in Cluster 4 Public Secondary Schools in Davao City was moderately extensive. Meanwhile, multimedia instruction in terms of learning outcomes, engagement, and learner satisfaction obtained moderately extensive descriptive ratings. The result implies that students can effectively use multimedia instruction as part of their learning strategy. They can integrate multimedia resources with other study methods to achieve better learning outcomes English learning attitude of senior high school students in Cluster 4 Public Secondary Schools in Davao City was rated as extensive. English learning attitude of senior high school students in terms of interest in learning, sense of belonging, self-concept in learning, and control strategies belongs to extensive rating. The result indicates that the mindset, beliefs, and emotions that students have towards the process of learning the English language is oftentimes manifested Multimedia instruction has a significant positive relationship with the English learning attitude of senior high school students in Cluster 4 Public Secondary Schools in Davao City. This implies that multicultural instruction encourages students to consider different viewpoints and experiences. This can stimulate critical thinking and enhance their ability to express themselves in English. The quantitative results on the moderately extensive multimedia instruction were further substantiated by codes (limited access to technology, resistance to change, limited integration into lesson plans, and socioeconomic factors) that emerged during the thematic analysis of the qualitative data, generally confirming the results of the quantitative

aspects of the study. The quantitative results on the extensive English learning attitude of senior high school students were further substantiated by codes (effective teaching methods; personal goals and aspirations; access to information; and recognition and rewards) that emerged during the thematic analysis of the qualitative data, generally confirming the results of the quantitative aspects of the study. The quantitative results on the significant relationship between multimedia instruction and English learning attitude of senior high school students were further substantiated by codes (increased motivation; alignment with technology skills; and self-directed learning) that emerged during the thematic analysis of the qualitative data, generally confirming the results of the quantitative aspects of the study. The salient quantitative and qualitative findings revealed a parallel result. The corroborated finding means that the quantitative and qualitative findings merged and connected.

4.3. Recommendations—The Department of Education should support professional development programs for teachers, helping them effectively integrate multimedia into their English language teaching. DepEd should allocate resources for schools to improve their techno-

logical infrastructure and provide access to multimedia resources, ensuring that all students can benefit from multimedia instruction. School principals should ensure that the school has the necessary equipment and resources for multimedia instruction and that these resources are readily available to teachers. Adding more, they should encourage and facilitate ongoing professional development for English teachers in multimedia integration. English Teachers should use multimedia resources in a balanced and pedagogically sound manner. Ensure that multimedia complements traditional teaching methods and aligns with curriculum goals. They should encourage student engagement and interaction with multimedia content, such as discussions, projects, and creative assignments. Senior high school students should embrace the opportunity to learn English through multimedia resources. Take the initiative to explore and engage with multimedia materials beyond what is assigned in class. They should actively participate in class discussions and activities related to multimedia instruction. Offer feedback to teachers about what works well and what can be improved.

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