Multilingual Instruction And Learning Comprehension Among Pupils In Davao Central District Schools

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Abstract. The study determined and evaluated the extent of using different languages as a medium of instruction and its association with the importance of learning comprehension among Schools in Davao Central District, Davao City Schools Division, Davao City Division. The study used non-experimental descriptive-correlational research design, utilizing an adapted survey instrument to gather responses from the randomly selected teacher-respondents. Data collected were treated using Mean scores with descriptive interpretation, Pearson r and Simple Linear Regression Analysis. Findings revealed that the extent of using multilingual instruction in terms of Bisaya or Vernacular, English, Filipino, and Multiple or Combination exhibits moderately extensive and the extent of learning comprehension in terms of cognitive, affective, and psychomotor exhibits enumerated indicators suggests moderately extensive in terms of cognitive, affective, and psychomotor in Davao Central District. A significant relationship exists between using multilingual instruction and learners' learning comprehension in Davao Central District. All indicators of integrative strategies of teachers, such as Bisaya or Vernacular, Filipino, English, and collaboration, indicate statistically significant influence on learners' learning comprehension.

1. Introduction

Language, is a system of conventional spoken, manual, or written symbols by means of which human beings, as members of a social group and participants in its culture, express themselves. In addition, a language is a system of communication which consists of a set of sounds and written symbols which are used by the people of a particular country or region for talking or writing. Learners begin their education in the language they understand best, their mother tongue and need to develop a strong foundation in their mother language before effectively learning additional languages. Therefore, language is a structured system of communication. The structure of a language is its grammar and the free components are its vocabulary. Languages are the primary means by which humans communicate, and may be conveyed through a variety of methods, including spoken, sign, and written language (Karabassova, 2022). Across the globe, the medium of instruction is the language used by the teacher to teach. Teaching the language, or educational content, through the target language increases

the amount of exposure the learner gets to it, and the opportunities they have to communicate in it, and therefore to develop their control of it. In the context, given English as language is used from the beginning of a course as the main language in class, and the teacher adapts their methodology to support meaning, by using a lot of visual information and non-verbal communication to support meaning (Go and Luen Loy, 2021). In this context, models of education delivering content teaching through learners' second language have rapidly increased in recent decades and are thought to offer a naturally motivating context for learners to use and learn the medium of instruction. However, the relationship between medium of instruction and language learning motivation specifically is under-explored (Henebry and Gao, 2018). On the other hand, Karabassova (2022) reported that the implementation of trilingual context of Kazakhstan, with a focus on teachers' conceptualization of integration. Kazakhstan is the first Central Asian country using three different languages as a medium of instruction for different content subjects as part of an ambitious national language-in-education policy. Findings suggest that most of the participating teachers were not aware of the pedagogical intentions and understood it merely as just teaching through another language. The subject teachers, who worked in the context of demanding enquiry-based curriculum, prioritized content over language, assuming only an indirect role in facilitating students' language development. This is where the Department of Education (DepEd) gets inspiration in its inclusion of Mother Tongue-Based Multilingual Education (MTB-MLE) as a feature of the Enhanced Basic Education Program. It mandates the use of the language that students are familiar with (their first language) as medium of instruction to allow them to grasp basic concepts more easily. As a subject, mother tongue education focuses on the development of speaking, reading, and writing from Grades 1 to 3 in the

mother tongue. As a medium of instruction, the mother tongue is used in all learning areas from Kinder to Grade 3 except in teaching Filipino and English subjects. Filipino is introduced in the second quarter of Grade 1 for oral fluency (speaking). For reading and writing purposes, it will be taught beginning in the third quarter of Grade 1. The four other macro skills which are listening, speaking, reading, and writing in Filipino will continuously be developed from Grades 2 to 6. The purpose of a multilingual education program is to develop appropriate cognitive and reasoning skills, enabling children to operate equally in different languages – starting with the first language of the child. Currently, DepEd uses 19 languages in MTB-MLE: Tagalog, Kapampangan, Pangasinan, Iloko, Bikol, Ybanag, Sinugbuanong Binisaya, Hiligaynon, Waray, Bahasa Sug, Maguindanaoan, Maranao, Chavacano, Ivatan, Sambal, Akianon, Kinaray-a, Yakan, and Sinurigaonon. The MTB-MLE is implemented in two modules: 1) as a learning/subject area and 2) as medium of instruction. In Davao City Schools Division, implementation of such program is on its peak to make learners develop a comprehensive learning, however, such implementation is not evident based on results and outcomes among learners' academic performance. Results shows that even there are switch coding in the delivery of instruction, still learners are not able to reach performance as targeted. The Davao Central District schools are still on the verged on coming up with a comprehensive instruction to augment learners' academic performance, thus, the researcher sought to provide evidences as to what are the factors that can augment learning abilities, thus this study is presented.

1.1. Review of Significant Literature—

*1.1.1. Multilingual Instruction—*A medium of instruction is the language used by teachers to convey information. In multilingual education, teachers use multiple languages to facilitate learning, especially in diverse class-

rooms (Wernicke et al., 2021). Proctor et al. (2021) described a multilingual literacy curriculum designed to enhance language development through dialogic approaches, multimodal texts, and metalinguistic awareness. Dunham et al. (2022) emphasized the importance of culturally sustaining teaching, while Gross and Crawford (2021) critiqued current bilingual instructional models, arguing for a framework integrating sociocultural and raciolinguistic contexts.

Language demands in different disciplines affect multilingual learners' engagement. Sanchez and Athanases (2022) examined how theater arts instruction can support multilingual students. In science education, Mokiwa (2020) found that the language of instruction significantly influences learning outcomes, emphasizing the need for differentiated instruction.

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1.1.3. Mother Tongue-Based Instruction— DepEd Order No. 74 (2009) institutionalized Mother Tongue-Based Multilingual Education (MTB-MLE) from Kindergarten to Grade 3. Studies show that learning in one's native language enhances comprehension and self-esteem (Sanchez et al., 2022). Solon-Villaneza et al. (2017) asserted that Cebuano Visayan linguistics assist English language learning by addressing pronunciation, pronouns, and grammar challenges. Alieto (2019) found a positive correlation between teachers' attitudes toward MTB-MLE and their willingness to implement it, noting that gender did not significantly influence this attitude.

1.1.4. Bilingual and English Instruction— Under the K-12 law, Filipino and English are the primary media of instruction. The Bilingual Education Policy (DepEd Order 42, s. 1987) aims for competence in both languages, maintaining regional languages as auxiliary media. English remains the dominant instructional language due to its role in business, science, and international communication (Velasco Malacaste, 2021). Studies by Wang (2023) and Hosan et al. (2022) highlighted the role of English proficiency and intercultural competence in effective instruction.

Perfecto (2022) examined translanguaging strategies used by English teachers to transition students from mother tongue instruction to English. Yuan, Chen, and Peng (2022) found that English-Medium Instruction (EMI) teachers' beliefs and policies shape teaching practices, while Duan, Kurhila, and Sert (2022) explored how bilingual resources aid vocabulary acquisition in higher education.

1.1.5. Multilingualism and Policy Implementation—The Philippines pioneered MTB-MLE but faces challenges in implementation (Belvi Morauda-Gutierrez, 2019). Gempeso and Mendez (2021) found discrepancies in MTB-MLE classroom practices, particularly in assessment alignment. Indigenous Peoples (IPs) face barriers to education, with English still being the dominant medium of instruction despite policies advocating for linguistic inclusion (Ed-

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uardo Gabriel, 2021). Goosens (2022) observed tensions in schools branding themselves as multilingual while maintaining monolingual curricula.

1.1.6. *Learning Comprehension and Cognitive Factors*

Reading comprehension is a complex cognitive process requiring active engagement. Shepard-Carey (2021) emphasized the importance of first-language integration in inference-making. Dockrell et al. (2022) found that multilingual classroom diversity challenges teachers, necessitating tailored pedagogical strategies.

Research suggests multilingualism enhances cognitive skills, including executive function and metacognitive abilities (Soleimani Rahmanian, 2018). Ansyah and Wachidi (2021) found that discussion-based learning benefits students with independent cognitive styles. Bairy (2019) advocated for a multilingual approach to mathematics education to deepen conceptual understanding.

1.1.7. *Affective and Psychomotor Learning*

Affective learning influences language acquisition through emotional and social factors (Ruck, 2020). Zhang (2022) found that behavioral, affective, and cognitive engagement contribute to language learning success. Flipped learning improves engagement and learning outcomes, with academic capability influencing effectiveness (Lee, Park Davis, 2022).

Psychomotor skills are essential in learning. Vanfleteren, Elen, and Charlier (2022) explored online platforms for psychomotor skill development, emphasizing motivation and cognitive load management. Supartini et al. (2021) demonstrated that song and movement enhance young children's psychomotor and cognitive development.

The literature underscores the complexities of multilingual instruction, the benefits of mother tongue education, and the challenges of implementing language policies. Further research is needed to optimize instructional strategies for multilingual learners and enhance comprehension outcomes across disciplines.

1.2. *Theoretical and Conceptual Framework*

This study is anchored on the theory of multilingualism, which uses more than one language, either by an individual speaker or a group of speakers, as claimed by D P Pattanayak and Prof Khageswar Mahapatra (2019). Multilingualism generally means knowledge of more languages than a native language. It is a language term that moves from monolingualism (knowing one language) beyond bilingualism (knowing two languages) to knowing many or multiple languages. The reason for language contact is the simple need for communication between human beings from different linguistic backgrounds. All children develop speech at different rates. Learning more than one language simultaneously won't affect how early or quickly your child learns to speak. Children exposed to more than one language from birth become native speakers of all their languages. Meanwhile, linguistic theory and affordance theory are the two theories of multilingualism. Linguistic Theory was formed by Noam Chomsky (1957) who described language as having a grammar largely independent of language use. Linguistic Theory argues that language acquisition is governed by universal, underlying grammatical rules that are standard for all typically developing humans. Chomsky's language acquisition theory argues that human brain structures naturally allow for the capacity to learn and use languages. Chomsky believed that rules for language acquisition are innate (inborn) and strengthen naturally as humans grow and develop. He concluded that children must have an inborn faculty for language acquisition. According to this theory, the process is biologically determined, the human species has evolved a brain whose neural circuits contain linguistic information at birth. Chomsky based his theory on the idea that all languages contain similar structures and rules, and the fact that children everywhere

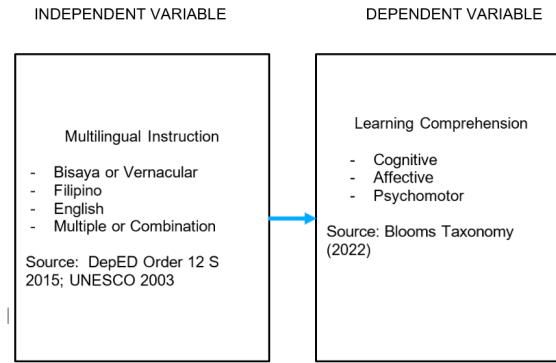INDEPENDENT VARIABLE   DEPENDENT VARIABLE

Fig. 1. Conceptual framework of the study

acquire language the same way, and without much effort, seems to indicate that we're born wired with the basics already present in our brains. On the other hand, affordance theory acknowledges that what one learns is dependent on, but not determined by the environment. Those oriented by Design Thinking have taken up that shift and are emerging as a significant influence in research into technology-mediated learning. Gibson (1979) introduced the concept of affordances to describe the relationships between organisms and their environments. J. J. Gibson presented the concept as "the affordances of the environment are what it offers the animal, what it provides or furnishes, either for good or ill". Affordance is defined as what the environment offers the individual and what it provides or furnishes, either good or ill (Gibson, 2014). According to Gibson, affordances are how we perceive environments as ways to meet our needs. There are things in the environment that allow us to meet our needs. These needs include shade, food, parking, safe walking, sitting, activities, etc. The affordances include toys, materials, apparatus, space availability, stimulation, and nurturing, which increase a toddler's development. Therefore, the home environment as an affordance can lead to optimal toddler development. Affordance includes both the environment and the child, meaning the affordance is unique and relative for each individual. Affordances provide helpful visual cues and psychological shortcuts that help users understand the tasks they can carry out on a website or within an app. When used well, affordances make your designs intuitive and easy to use, which increases conversions. Affordance theory states that the world is perceived not only in terms of object shapes and spatial relationships but also in terms of object possibilities for action (affordances), perception drives action. This study's dependent variable was Multilingual Instruction, with the corresponding indicators Bisaya or Vernacular, Filipino, English, and Multiple or Combination. Multilingual instruction is crucial in education because it fosters cognitive development, improves academic achievement, supports cultural identity, promotes social inclusion, and enhances global understanding, ultimately leading to better learning outcomes and a more interconnected world. On the other hand, the dependent variable was Learning Comprehension with the indicators namely: Cognitive, Affective, and Psychomotor. Comprehension, especially reading comprehension, is the foundation for academic success across all subject areas. Proficient comprehension skills enable students to access and analyze information, engage in critical thinking, solve problems, and communicate effectively.

1.3. Statement of the Problem—The study was conducted to determine the extent to which different languages are used as mediums of instruction and the extent to which learning comprehension is increased among Schools in Davao Central District, Davao City Schools Division. This specifically sought to answer the following statement of the problem:

(1) What is the extent of using multilingual instruction in terms of;
    (1) Bisaya or Vernacular;
    (2) Filipino;
    (3) English, and
    (4) Multiple or Combination?
(2) What is the extent of learning comprehension among elementary pupils in Davao Central District in terms of
    (1) cognitive;
    (2) affective and
    (3) psychomotor?
(3) Is there a significant relationship between multilingual instruction and learning comprehension?
(4) Which among the indicators of multilingual instruction significantly influence learning comprehension among elementary learners in Davao Central District?

1.4. Hypothesis—To provide empirical evidence given the posed theoretical and conceptual frameworks as claimed by the study, null hypotheses were tested at 0.05 alpha level of significance, stating: Ho 1: There is no significant relationship between multilingual instruction and learning comprehension of learners, and, Ho 2: None from among the indicators of multilingual instruction significantly influence learning comprehension among elementary learners in Davao Central District. The results of this study were beneficial and provide significant input to stakeholders. It would also remove the basis for the school heads and teachers to collaborate and develop sound school policy actions that govern efficiency performance. The following stakeholders shall be beneficial given the study's output. School Principals. As an instructional leader, the School Principal sets the appropriate strategies to manage and deliver the curriculum and instruction in Key Stage 1, particularly Grade 2 level and its learning comprehension across learning areas. Thus, the study results would provide insights to Davao Central District school heads on how much learning comprehension among the indicators increases the learners' musical-academic performance through organizing an ensemble. Teachers. Teachers were expected to deliver quality instructions and conduct learning assessments across grade levels; thus, quality outputs through using different languages in teaching processes would generate sound learning comprehension among learners as the DepED mission stated that the teacher would nurture learners into a safe learning environment. In this context, teachers ensure that their efforts in implementing and facilitating learning to learners through a safe learning environment would not be in vain, thus, having the learners safe and confident in the academic learning given a complete face-to-face modality. The study's results would provide an idea for teachers to see if approaches and management in using different languages in school can influence learning comprehension performance and make teachers more effective. Learners become more productive and contributory to their development skills.

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Parents. Parents play significant roles in the skills development of their young learners. Parents expect their children to be safe in school while developing their personality and academic successes. The results of the study would give insights and enlightenment to the members of the school Governing Council through Parent Teachers' Association, in advocating time consciousness and honesty throughout school days by empowerment and to continuously improve the process and performance of the school and learners' academic achievement as well through full participation in the whole cycle process of the project. Future Researchers. Implications based on the study's generated results would provide more information to future researchers to replicate the musical practices to be discovered in the proposed research. These practices include the type and approaches to managing time consciousness, honesty, and the elements of efficiency in improving the quality delivery of education outputs through the process introduced in the MELCs. The following terms were variables used in the study, and definitions by concept and operation are presented according to how the terms were used in the study context. This served as the reference in analyzing and interpreting the results to come up with meaningful implications for a better understanding and recommendations. Multilingual Instruction. The term refers to the medium of instruction, the language the teacher uses to teach. Teaching the language, or educational content, through the target language increases the amount of exposure the learner gets to it and the opportunities they have to communicate in it, and therefore, develop their control of it. Multilingualism has been proven to help a child develop superior reading and writing skills, multilingual children have overall better analytical, social, and academic skills than their unilingual peers. This study uses the term as the independent variable, using indicators in languages such as Bisaya or vernacular, Filipino, and English. Learning Comprehension. The term refers to comprehension, which was an active and complex process that includes simultaneously extracting and constructing meaning from text. It enables readers to derive meaning from text when they engage in intentional, problem-solving, and thinking processes. This study used comprehension as the dependent variable, and indicators are cognitive, affective, and psychomotor.

2. Methodology

This chapter discussed the methodical process used to conduct the study. This includes the process of selecting the design of the study, the respondents, the sampling method, the research instruments to be used in data gathering, the procedure, the ethical considerations, and lastly, the data analysis. These steps were considered essential to assume appropriateness and correctness in the conduct of the methodical steps.

2.1. Research Design—The conducted study used non-experimental, descriptive-correlational, and predictive research design. This refers to studies which describe the assumed variables and the relationships that occur naturally between and among them. Predictive correlational studies predict the variance of one or more variables based on the variance of another variable/s. Moreover, these designs aim to get a picture of a given group of people's current thoughts, feelings, or behaviors. Descriptive research is summarized using descriptive statistics. Correlational research designs measure two or more relevant variables and assess a relationship between or among them. (Pallant, 2020). On the other hand, this type of research tries to ex-

trapolate from the analysis of existing phenomena, policies, or other entities to predict something that has not been tried, tested, or proposed before (Gujarati, 2020). In this study, indicators under the independent variable language used as multilingual instruction, where indicators are Bisaya or vernacular, Filipino, English, and Combination or Multiple, shall be measured for their extent of use in schools and their significant correlation with the dependent variable, which is the learning comprehension given cognitive, affective, and psychomotor. Using the design mentioned, variables along with their indicators are assumed to be mentioned, and the researcher empirically provides evidence that the presented hypothesis was null and void in nature.

2.2. Research Respondents—The study's respondents were the Elementary School Teachers in Davao Central District. Using the Raosoft sample size calculator, 120 teachers were chosen randomly from each elementary school. Once the respondents were determined, they were informed through an online platform or face-to-face, considering the availability of Wi-Fi connections. They were likewise oriented about the purpose and importance of the study. These respondents were highly engaged with the Department of Education's programs, projects, and activities regarding effective instructional delivery. They are always and completely engaged with the school learning action cell study group, which highlights the multilingual delivery of instruction to make more comprehensive pedagogical practices. These are the teachers coming from the Elementary School of Davao Central District and have been teaching for more than three years in the public schools where they are assigned. The researcher further correctly observed research ethics and random selection to avoid bias and threats to validity in data gathering processes.

2.3. Research Instrument—This proposed research study used a self-made survey instrument. Items were adapted from the reviewed literature on multilingual instruction and learning comprehension. The survey questionnaire has two parts, each containing indicators of the respective variables mentioned. The statements of the survey were placed in contexts based on the definition of the variables under study. Further, the survey statements were subjected to a test-retest or validity and reliability testing using Cronbach Alpha at the .05 confidence level. They generated an alpha Cronbach of 0.837, which means an 83.7 percent level of trust in the validity and reliability of the survey statement constructs (Pallant 2010). The questionnaire used a 5-point Likert scale to determine the extent of organizing the drum and lure ensemble. Scale, descriptive rating and interpretation are provided below:

Scale	Descriptive Rating	Interpretation
4.20 – 5.00	Very Extensive	The multilingual instruction is always manifested
3.40 – 4.19	Extensive	The multilingual instruction is oftentimes manifested
2.60 – 3.39	Moderately Extensive	The multilingual instruction is sometimes manifested
1.80 – 2.59	Less Extensive	The multilingual instruction is rarely manifested
1.00 – 1.79	Not Extensive	The multilingual instruction is not manifested

Meanwhile, to determine the extent of learning comprehension, a 5-point Likert scale was used in this study, as presented below;

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2.4. Data Gathering Procedure—The preceding statements explain the steps of the data-gathering procedure that the researcher must comprehensively consider and follow. They are based on the policies and guidelines of the Rizal Memorial Colleges and the existing guidelines of the IATF to ensure safe and lower risks in gathering pertinent data. Permission to conduct the study. In November 2022, the conceptualization of the technical paper was developed through the discussion with the thesis adviser. The research study adopted the standard ethics procedures in data collection and health protocol as provided by the IATF policy. Sometime in the second week of December 2022, as soon as the research proposal presentation is approved by the panel of members and the dean of the college, the researcher will then write a letter of permission to the office of the Schools Division Superintendent of Davao City, through channel and sought permission to collect data and conduct the study within the schools of Davao Central District. Distribution and retrieval of the questionnaire. On the second week of January 2023, the researcher prepared and created a Google sheet form for the online survey collection process which were sent to the randomly selected respondents via email addresses, and for respondents who do not have internet access, a prepared hard copy of the survey sheets shall be given to each of them. Once done, the link was sent, and responses were expected to be generated right away, thus, ready for sorting, analyzing, and interpreting. Collation and statistical treatment of data. The preliminary analysis results were given to the thesis adviser on February 2023. This is for coaching in providing interpretations and implications of the study and further deepening the analysis to make the interpretations more meaningful.

2.5. Ethical Considerations—The researcher sought guidance and advice from the thesis adviser. This resulted in proper authorization and consent being obtained from the respondents of the study, to ensure that all their rights would be fully protected, specifically in handling the data, however, not limited to: Voluntary Participation – The researcher considered several ethical considerations to ensure the study was conducted appropriately. To comply with ethical considerations when conducting research, all participants were provided with informed consent to participate in the survey. This indicated that the participation of respondents was voluntary in nature. Also, the purpose and benefits of the research are to explain to the respondents, and the respondents were informed that they should, if they wish to withdraw at any point during the data gathering procedure, they could do so (Lotich, 2011).

Privacy and Confidentiality – Profile of the respondents of the study was treated in utmost confidential in nature for the purpose of protecting their rights especially so that the respondents of the study are minor in their age. Privacy and confidentiality were specifically observed through presentation and discussions of results (Koenigna and MacMillan, 2004).

Informed Consent Process – It further explained to the respondents that their information would remain private and confidential and that the specific content of their survey would only be discussed with the research adviser. The research adviser and the respondents are unknown

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to each other. In the final report, the identities of the participants were removed and pseudonyms were used for the participants. While sharing the purpose of the study with the respondents, the researcher also shared personal background and some of the researcher's individual stories. This helped build trust and in turn encouraged the respondents to answer the survey honestly.

Risks – Moreover, the researcher informed the respondents that their participation in the survey would not bring any foreseeable risks to their health or well-being. Thus, the respondents were told that if they become upset or distressed as a result of answering the questions that are part of the researcher's standard battery, then the researcher would have helped them obtain a referral for the respondents to see a trained professional who can help process these feelings (Lotich, 2011).

Benefits – Further, the study's observable benefits were immediately disseminated to the stakeholders, who were parents. The findings of the study generated facts that are important for enhancing the learners' readiness (Koenig and MacMillan, 2004). The findings of the study would serve as a basis for public schools at the elementary level to pay attention to the language used as a tool in learning comprehension.

Plagiarism – Furthermore, the researcher strictly adhered to other ethical issues, which include plagiarism, fabrication, and falsification (Lakey and Cohen, 2020). The researcher ensured that the resources being used in this study are properly cited. The authors' ideas are paraphrased and properly synthesized to abstain from plagiarism. No fabrication or inclusion of data, survey, or enactment that never arose in data gathering. The researcher made only conclusions based on the study's results. In the event of unintentional plagiarism, fabrication, or falsification of ideas, the researcher immediately revised the manuscript (Lotich, 2011).

Fabrication – The researcher guaranteed that provisions on deceit and conflict of interest were strictly observed. The researcher assured the respondents that the study was done with honesty and transparency. Evidence shows that the benefit of misleading the respondents outweighs any potential harm to them (Creswell, 2014). The researcher assisted the respondents satisfactorily and talked through the process and the outcome of the study. They were given a general idea of what the researcher was investigating and why such a study was conducted. Their role and contribution to the study were promptly explained.

Falsification – This study complied with the citation rules set based on the APA 7th edition citation format to avoid misrepresenting work or modifying any data gathered in the study (Cohen, 2020). The data and information that were written were presented in the most accurate way possible. Conflict of Interest – The researcher ensured that conflict of interest (COI) in this study is highly observed (Lotich, 2011). No set of conditions as to professional judgement concerning primary interest as the respondents' welfare or the validity of the research tends to be influenced by the secondary interest, such as financial or academic gains, or any forms of recognition.

Deceit – This paper does not utilize any form of untruthfulness to harm anyone, especially the respondents, since all information was checked and validated by the panel of experts (Lakey and Cohen, 2020).

Permission from the School/Location – Before the study, the researcher procured a letter to conduct a study duly signed by the Dean of Graduate School and provided it to the Schools Division Superintendent. Then, the reply from the said office allowing the researcher to conduct the study was delivered to the school principals, where the study was conducted. Authorship – Finally, upon the approval of the final version to be published, the researcher considered for the authorship of the adviser and few other individuals such as colleagues who gave substantial contributions to conception and de-

sign of the study, or acquisition of data, or analysis and interpretation of data and drafting the manuscript or revising it critically for important intellectual content as co-authors (Lotich, 2011). Finally, the respondents can contact the researcher at the mobile number and email address given on the informed consent form if they have questions, concerns, or complaints about the research. The researcher also ensured that the study's benefits would be shared during meetings and conferences with stakeholders as part of the audience.

2.6. Data Analysis—Mean scores and standard deviation – Was used to address statement problems posed in number one (1) on the extent of multilingual instruction, and statement problem number two (2) on the extent of learning comprehension among learners in Davao Central District.

Pearson Product Moment Correlation Coefficient or Pearson-r – Was used to determine the strength/direction of a significant relationship between the extent of multilingual instruction and the learning comprehension among learners in Davao Central District. Linear Regression analysis was used to address problem number 4, on the indicators of multilingual instruction that significantly influence the learning comprehension among learners in Davao Central District (Pallant, 2000) and (Gujarati, 2000). All data processing and analysis were performed using the Jeffrey's Statistics Amazing Program (JASP) version 0.12.20. When results were yielded, discussions and interpretations followed.

3. Results and Discussion

This chapter presents, analyzes, and interprets data gathered in tabular and textual form to provide clear ideas and information on the queries based on the problem statement. Various reviews present implications of the results to corroborate and argue the hypothesis and theory as claimed and posed in the study.

3.1. Extent of Multilingual Instruction—A medium of instruction is the language a teacher uses to teach students. Simply put, it is a means of conveying information to students. Such a medium could be the official language in the country, or it could be the native mother tongue of the students. In an English-speaking country like the United States, the medium of language used by teachers to teach students is English. Any immigrant from the United States from another country would have to learn the language to join other students in class. In some types of education, such as multilingual or bilingual education, the teachers may use more than one medium of instruction to teach the students. Deciding which language to use for instruction is essential because it can affect how students learn. Someone who grew up speaking French or Russian might not adapt quickly to the con-cept of learning in English. In situations like that, a combination of the mother tongue and the chosen medium of instruction will work better until the person is more confident in the new language. For instance, if it is a bilingual type of education and the students are a mixture of Spanish and English, the medium of instruction will not be only English but a mixture of Spanish and English. In multilingual education, the language of instruction will not be just one language; it will also include two or more other languages. In the Philippines, Multilingual instruction refers to an educational approach that aims to use the student's mother tongue, along with other languages, to teach academic content. This approach recognizes the importance of a student's first language in acquiring knowledge and skills while also recognizing the value of other languages, particularly English and Fil-

ipino, in the global context. In the Philippines, over 170 languages are spoken, and the majority of the population speaks a language other than Filipino or English. Using the mother tongue in education has been recognized as a means to promote better learning outcomes for students, particularly those who speak a language other than Filipino or English at home. The Department of Education (DepEd) has implemented the Mother Tongue-Based Multilingual Education (MTB-MLE) policy, which aims to provide students with a solid foundation in their mother tongue while also developing proficiency in Filipino and English. Under this policy, the mother tongue is used as the medium of instruction in the early years of schooling, with Filipino and English gradually introduced as subjects. The MTB-MLE policy has been implemented in various regions in the country, and studies have shown its positive impact on students' academic performance and language development.

3.1.1. Extent of using Multilingual Instruction in terms of Bisaya or Vernacular —Indicated in Table 1 is the extent of using multilingual instruction in terms of Bisaya or Vernacular. The result is focused on the highest and lowest mean ratings of indicators which are as follows: jargon is not used when talking to learners (3.28); fluent with the language of the locality (3.25); used as a conversational language with the learners (3.25); mother-tongue is evident in the class discussion (3.24), and used terms are standard within the locality and community (3.22), suggests that bisaya or vernacular is sometimes manifested. The overall mean rating of multilingual instruction is 3.23, which denotes moderately extensive use of multilingual instruction in Bisaya or Vernacular.

Table 1. Extent of Using Multilingual Instruction in Terms of Bisaya or Vernacular

No.	Bisaya or Vernacular	Mean (X)	Descriptive Equivalent
1	Used terms are standard within the locality and community	3.22	Moderately Extensive
2	Mother tongue is evident in the class discussion	3.24	Moderately Extensive
3	Jargon is not used when talking to learners	3.28	Moderately Extensive
4	Fluent with the language of the locality	3.25	Moderately Extensive
5	Used as a conversational language with the learners	3.25	Moderately Extensive
Overall Mean		**3.24**	**Moderately Extensive**

The Philippines is known for its linguistic diversity, with over 170 languages spoken nationwide. Multilingual instruction has been recognized as an effective means of promoting better learning outcomes for students. However, the extent of using multilingual instruction in terms of Bisaya or vernacular, which is widely spoken in the Visayas and Mindanao regions, is still a discussion among educators and policymakers. The DepEd Order No. 74, issued in 2009, institutionalized Mother Tongue-Based Multilingual Education (MTB MLE) nationwide and mandated the use of the learners' mother tongue (MT) in improving learning outcomes from Kindergarten to Grade Three (DepEd, 2012). The mother tongue could be used to explain the methodology and issues behind problems before switching to the medium. It is essential to allow students to grow accustomed to learning in the chosen medium. This is because the more exposed a student is to the new language, the more they will understand. If students keep referring to their mother tongue, they will likely not be motivated to learn the new language. An immigrant to a new country may not understand the message conveyed

through a medium of instruction because they cannot understand the language. Still, with practice, they will start to grasp the fundamentals of the new language over time. A study conducted by Tumulak (2018) found that using the mother tongue, particularly Bisaya, as the medium of instruction can lead to better academic performance and language development among students in the Visayas region. The study also revealed that using Bisaya in the classroom can improve students' self-esteem and help them develop a stronger cultural identity. Another study by Tumulak and Quinito (2019) showed that using Bisaya in multilingual instruction can help students better understand complex concepts and ideas. The study found that using Bisaya can help bridge the gap between students' home language and the academic language used in school, making it easier for them to comprehend and retain knowledge. However, a study by Calub and Castelo (2020) revealed that using Bisaya in multilingual instruction may also have some challenges. The study found that some teachers may lack proficiency in Bisaya, which can lead to inconsistencies in language use and affect students' learning outcomes. The study recommended teacher training programs to improve their proficiency in Bisaya and other mother tongue languages. Multilingual instruction in terms of Bisaya or vernacular has been shown to impact students' academic performance and language development positively. However, some challenges need to be addressed, such as the need for teacher training programs to improve their

proficiency in Bisaya. Further research and discussion among educators and policymakers are required to fully understand the extent of multilingual instruction in the Philippine setting.

3.1.2. Extent Of Multilingual Instruction Used In Filipino—Indicated in Table 2 is the extent of multilingual instruction used in Filipino. The result is focused on the highest and lowest mean ratings of indicators which are as follows: uses the language in conversation during class discussions (3.24); ability to make learners understand the meaning of the terminology (3.23); translate the language into vernacular for correct interpretation (3.23); manifests importance in unlocking of terms and difficulties (3.22) and used when discussions in the class are needed (3.21), suggest that using Filipino language is sometimes manifested. The overall mean rating of Filipino is 3.22, which denotes moderately extensive use of multilingual instruction in terms of Filipino. Under the K-12 law, the mother tongue should be used as the medium of instruction from kindergarten until Grade 3. DepEd Undersecretary Epimaco Densing suggested using English and Filipino as the medium of instruction in schools as early as kindergarten. Filipino should be used as the medium of instruction in the educational system because students learn best in this language. The Constitution recognized this when it declared Filipino as a language of the educational system. Using the Filipino language links teachers and students in communicating ideas and thoughts. Good communication improves understanding between participants.

DepEd order 42 S 1987 exposes the policy on bilingual education. The provision of Article XIV Section 7 of the 1987 Constitution states:"For purposes of communication and instruction, the official languages of the Philippines are Filipino and, until otherwise provided by law, English. The regional languages are

the regional official languages and shall serve as auxiliary media of instruction therein. In consonance with this mandate and the Department of Education and Culture's declared policy on bilingualism in the schools (NBE Resolution No. 73-7, s. 1973), the Department of Education, Culture, and Sports hereby promul-

Table 2. Extent of Using Multilingual Instruction in Terms of Filipino

No.	Filipino	Mean (X)	Descriptive Equivalent
1	Used when discussions in the class are needed	3.21	Moderately Extensive
2	Manifests the importance of the unlocking of terms and difficulties	3.22	Moderately Extensive
3	Ability to make learners understand the meaning of the terminology	3.23	Moderately Extensive
4	Uses the language in conversation during class discussions	3.24	Moderately Extensive
5	Translate the language into vernacular for correct interpretation	3.23	Moderately Extensive
Overall Mean		**3.22**	**Moderately Extensive**

gates the following policy: The Policy on Bilingual Education aims to achieve competence in both Filipino and English at the national level through teaching both languages and using them as media of instruction at all levels. The regional languages shall be used as auxiliary languages in Grades I and II. Filipinos aspire to be enabled to perform their functions and duties as Filipino citizens in English to meet the needs of the country and the community of nations. The goals of the Bilingual Education Policy shall be enhanced learning through two languages to achieve quality education as called for by the 1987 Constitution; the propagation of Filipino as a language of literacy; the development of Filipino as a linguistic symbol of national unity and identity; the cultivation and elaboration of Filipino as a language of scholarly discourse that is to say, its continuing intellectualization; and the maintenance of English as an international language for the Philippines and as a non-exclusive language of science and technology. Filipino and English shall be used as media of instruction, and the use shall be allocated to specific subjects in the curriculum as indicated in Department Order No. 25, s. 1974. The regional languages shall be used as auxiliary media of instruction and as initial language for literacy where needed. Filipino and English shall be taught as language subjects at all levels to achieve the goals of bilingual competence. Since competence in the use of both Filipino and English is one of the goals of the Bilingual Education Policy, continuing improvement in the teaching of both languages, their use as media of instruction and the specification shall be the responsibility of the whole educational system. Tertiary-level institutions shall lead the continuing intellectualization of Filipinos. Further, in a study conducted by Arriesgado (2018), it was found that using Filipino as the medium of instruction can lead to better academic performance and language development among students. The study revealed that students who received instruction in Filipino showed significant improvements in their reading, writing, and speaking skills. The study also found that using Filipino can help bridge the gap between student's home language and the academic language used in school. Another study by Lopez and Casiguran (2019) showed that the use of Filipino in multilingual instruction can help promote cultural awareness and understanding among students. The study found that using Filipino in the classroom can help students appreciate the diversity of the Philippine culture and develop a stronger sense of national identity. However, a study by Tirona and Salud (2020) revealed that there are challenges in using Filipino in multilingual instruction. The study found that some students may struggle to understand and use academic language in Filipino, particularly those who speak a different language at home. The study recommended the

need for teacher training programs to improve their proficiency in Filipino and other mother tongue languages. The use of multilingual instruction in terms of the Filipino language has been shown to have positive impacts on student's academic performance, language development, and cultural awareness. However, there are also challenges that need to be addressed, such as the need for teacher training programs to improve their proficiency in Filipino. Further research and discussion among educators and policymakers are needed to fully understand the extent of using multilingual instruction in the Philippine setting.

3.1.3.   Extent Of Using Multilingual Instruction In Terms Of English —Show in Table 3 is the extent of using multilingual instruction in terms of English. The result is focused on the highest and lowest mean ratings of indicators which are as follows: the ability to make learners understand the meaning of the terminology (3.25); using the language in conversation during class discussions (3.24); translation of the language into vernacular for correct interpretation (3.23); used when discussions in the class are needed (3.22) and manifest importance in unlocking of terms and difficulties (3.22) suggest that using the English language is sometimes manifested. The overall mean rating of using English is 3.22 denotes moderately extensive use of multilingual instruction in terms of English.

Table 3. Extent of Using Multilingual Instruction in Terms of English

No.	English	Mean (X)	Descriptive Equivalent
1	Used when discussions in the class are needed	3.22	Moderately Extensive
2	Manifests importance in unlocking of terms and difficulties	3.22	Moderately Extensive
3	Ability to make learners understand the meaning of the terminology	3.25	Moderately Extensive
4	Uses the language in conversation during class discussions	3.24	Moderately Extensive
5	Translate the language into vernacular for correct interpretation	3.23	Moderately Extensive
Overall Mean		**3.23**	**Moderately Extensive**

English serves as the medium of instruction in our country. It is the language of the academe, and therefore, it has the ability to reach a great number of people. The medium of instruction is the language used by the teacher to teach. Teaching the language, or educational content, through the target language increases the amount of exposure the learner gets to it and the opportunities they have to communicate in it, and therefore to develop their control of it. In the Philippines, English prevails as the predominant medium of instruction. It is used more in teaching rather than the national language, which is Filipino. All subjects except the subject of Filipino are taught in English. It is the language of the academe, and therefore, it has the ability to reach a great number of people. As it is used in school, English is helping mold the minds of the children who are to become the future of the Philippines. Students who have a good command of English language skills can pursue their higher studies in any university in the world where English is a medium of instruction. Besides, the students also shared that EMI has benefited them by enhancing their reading and speaking skills. Today, English is constitutionally named as one of the Philippines' official languages, and it continues to be an integral part of local life and culture. English is the language of business, sci-

ence, technology, government, education, and international communication. English has always been one of the official languages of the Philippines and is spoken by more than 14 million Filipinos. It is the language of commerce and law, as well as the primary medium of instruction in education. Wang (2023) examined the influence of English language proficiency and intercultural competence on the English-medium instruction lecturer's classroom leadership. It analyzes self-reported data obtained by three measuring scales from 188 English-medium instruction lecturers at a Chinese university. The Pearson correlational analysis indicated that there were significant positive relationships between the English-medium instruction lecturer's classroom leadership and the two predicting factors. The multiple regression analysis suggested that both intercultural competence and English proficiency contribute much to the variance of the English-medium instruction lecturer's classroom leadership. It was found that the lecturer's language proficiency and intercultural communicative abilities could be two determining factors for the lecturer to deliver their disciplinary knowledge and command the class in an engaging and competent manner. The findings may provide implications for the strategic intervention of English-medium instruction educators in institutions of higher education. In the Philippine setting, English is considered as an important language due to its use in global communication and as a language of instruction in higher education. However, the extent of using multilingual instruction in terms of English language is still a topic of discussion among educators and policymakers. Macapagal and Galve (2018), it was found that using English as a medium of instruction can lead to better academic performance in science and mathematics among students. The study revealed that students who received instruction in English showed significant improvements in their understanding of scientific and mathemat-

ical concepts. The study also found that using English can help students prepare for higher education and future employment opportunities. Sarmiento and Sevilla (2019) showed that the use of English in multilingual instruction can help develop students' critical thinking skills. The study found that students who received instruction in English were able to analyze and evaluate information more effectively, leading to better decision-making skills. The study also revealed that using English can help students become more confident in their ability to communicate in a global context. However, a study by Santos and Castillo (2020) highlighted the need to balance the use of English and Filipino in multilingual instruction. The study found that some students may struggle to understand academic language in English, particularly those who speak a different language at home. The study recommended the need for a bilingual approach that allows for the use of both English and Filipino to cater to the diverse linguistic backgrounds of students. The use of multilingual instruction in terms of the English language has been shown to have positive impacts on student's academic performance, critical thinking skills, and global communication. However, the need to balance the use of English and Filipino in multilingual instruction should also be considered to cater to the diverse linguistic backgrounds of students. Further research and discussion among educators and policymakers are needed to fully understand the extent of using multilingual instruction in the Philippine setting.

3.1.4. Extent Of Using Multilingual Instruction In Terms Of Multiple Or Combination—Show in Table 4 is the extent of using multilingual instruction in terms of Multiple or Combination. The result is focused on the highest and lowest mean ratings of indicators which are as follows: let learners talk with classmates in their own language (3.23); encourage learners to use languages when expressing ideas during

discussions (3.22); make learners speak in their own language (3.22); uses combination when trying to switch code for better understanding (3.21), and facilitates classes using multiple languages for better understanding (3.21), suggest that using Multiple or Combination languages is sometimes manifested. The overall mean rating of using Multiple or Combination language is 3.21 denotes moderately extensive use of multilingual instruction in terms of Multiple or Combination languages. Multilingualism practice tends to create the development and general acquisition of cross-cultural communication skills. In this regard, people tend to learn different

skills of the languages in place especially speaking, reading, and even writing. Students learn the official language and two other languages with the intent of becoming multilingual. In the classroom, multilingual education stresses teaching children while supporting their mother tongue or native language. Students learn better, and outcomes are better when taught in their native languages. The many cognitive benefits of learning languages are undeniable. People who speak more than one language have improved memory, problem-solving and critical-thinking skills, enhanced concentration, ability to multitask, and better listening skills.

Table 4. Extent of Using Multilingual Instruction in Terms of Multiple or Combination

No.	Multiple or Combination	Mean (X)	Descriptive Equivalent
1	Uses combination when trying to switch code for better understanding	3.21	Moderately Extensive
2	Encourage learners to use languages when expressing ideas during discussions	3.22	Moderately Extensive
3	Makes learners speak in their own language	3.22	Moderately Extensive
4	Facilitates classes using multiple languages for better understanding	3.21	Moderately Extensive
5	Let learners talk with classmates in their own language	3.23	Moderately Extensive
Overall Mean		**3.21**	**Moderately Extensive**

A study by Gonzales, Sta. Ana and Peñaranda (2018) revealed that using a combination of English and Filipino, along with regional languages, in multilingual instruction can lead to better student engagement and learning outcomes. The study found that students who received instruction in multiple languages showed improved comprehension, participation, and motivation in class. The study also highlighted the need for teacher training and curriculum development to support the use of multiple languages in instruction. Another study by Dominguez, Javier, and Valenzuela (2019) showed that using a combination of languages

in multilingual instruction can help develop students' language proficiency and cultural competence. The study found that students who received instruction in a combination of languages showed better proficiency in their first language and a greater appreciation for other cultures. The study also recommended the need for schools to provide resources and support for the use of multiple languages in instruction. However, a study by Bautista and Reyes (2020) highlighted the challenges in implementing multilingual instruction using multiple or combination languages in the Philippine setting. The study found that some teachers and students

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may lack the necessary language skills and resources to effectively use multiple languages in instruction. The study recommended the need for policy support and capacity-building programs to address these challenges. The use of multiple or combination language in multilingual instruction has been shown to have positive impacts on student engagement, learning outcomes, language proficiency, and cultural competence. However, challenges in implementation should also be considered, including teacher and student language skills and resource availability. Further research and discussion among educators and policymakers are needed to fully understand the extent of using multilingual instruction in terms of multiple or combination language in the Philippine setting.

3.1.5. *Summary Of The Extent Of Using Multilingual Instruction*—Table 5 presents the summary of the extent of using multilingual instruction. The result is focused on the mean ratings of indicators which are as follows: Bisaya or vernacular (3.24); English (3.23) Filipino (3.22), and multiple or combination (3.21) exhibits enumerated indicators are sometimes manifested; thus, moderately extensive in using Multilingual Instruction.

Table 5. Summary of the Extent of Using Multilingual Instruction

No.	Extent of Using Multilingual Instruction	Mean	Descriptive Equivalent
1	Bisaya or Vernacular	3.24	Moderately Extensive
2	Filipino	3.22	Moderately Extensive
3	English	3.23	Moderately Extensive
4	Multiple or Combination	3.21	Moderately Extensive
Overall Mean		**3.22**	**Moderately Extensive**

Several studies have been conducted on the association of using Bisaya or Vernacular, Filipino, English, and multilingual or combination languages as a medium of instruction and the extent of learning comprehension. A study by Banogon and Saniel (2018) investigated the use of Bisaya or Vernacular as a medium of instruction in elementary schools in the Philippines. The study found that the use of Bisaya or Vernacular as a medium of instruction improved student comprehension and retention of academic content. The study also highlighted the need for further research to explore the potential benefits and challenges of using Bisaya or Vernacular as a medium of instruction. A study by Almario (2019) explored the use of Filipino as a medium of instruction in higher education institutions in the Philippines. The study found that the use of Filipino as a medium of instruction improved student comprehension and engagement, particularly among students whose first language was Filipino. The study also recommended the need for further research to investigate the potential benefits and challenges of using Filipino as a medium of instruction in different academic disciplines. A study by Nolasco and de Guzman (2020) investigated the use of English as a medium of instruction in higher education institutions in the Philippines. The study found that the use of English as a medium of instruction improved student comprehension and proficiency in the English language. However, the study also highlighted the need for academic institutions to provide support for students who may struggle with English as a second language. A study by Gonzales and Sta. Ana (2018) explored the use of multilingual or combination languages as a

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medium of instruction in elementary schools in the Philippines. The study found that the use of multiple languages in instruction improved student comprehension, participation, and motivation. The study also recommended the need for teacher training and curriculum development to support the use of multilingual or combination languages in instruction. The use of Bisaya or Vernacular, Filipino, English, and multilingual or combination languages as a medium of instruction has been shown to have positive impacts on student comprehension and engagement. However, further research is needed to fully understand the potential benefits and challenges of using these languages as a medium of instruction in different academic disciplines and levels of education. Moreover, it is important to provide support for students who may struggle with the language used as a medium of instruction to ensure equitable access to education.

3.2. The extent of Learning Comprehension—Comprehension is an active and complex process which includes the act of simultaneously extracting and constructing meaning from text. enables readers to derive meaning from a text when they engage in intentional problem-solving, and thinking processes. Without comprehension, children gain no meaning from what they read. Comprehension strategies are used to increase children's understanding of the text to help them become active readers by engaging with the text. Learning comprehension is a crucial aspect of education, especially at the elementary level, where students are just starting to develop their cognitive, affective, and psychomotor skills. Cognitive development refers to the acquisition of knowledge and intellectual skills, including memory, attention, reasoning, and problem-solving. Affective development, on the other hand, refers to the development of emotions, attitudes, and values, while psychomotor development pertains to the development of physical and motor skills. Several studies have shown that cogni-

tive, affective, and psychomotor development are all important in enhancing learning comprehension among elementary school learners in the Philippines. For instance, a study by Dizon and associates (2018) found that the use of problem-based learning (PBL) was effective in enhancing the cognitive development of students, which in turn led to higher levels of learning comprehension. The researchers noted that PBL helped students develop their critical thinking skills and problem-solving abilities, which are essential for understanding complex concepts. Similarly, a study by Fernandez and colleagues (2019) showed that incorporating affective development in the classroom through positive reinforcement and a supportive learning environment can enhance learning comprehension among elementary school learners. The researchers found that students who felt supported and valued in the classroom were more likely to engage in learning and exhibit better academic performance. Finally, psychomotor development is also essential for enhancing learning comprehension among elementary school learners. A study by Bautista and associates (2019) found that incorporating physical activity into the classroom, such as through games and exercises, helped students develop their psychomotor skills and increase their engagement and motivation to learn. In conclusion, learning comprehension among elementary school learners in the Philippines is closely associated with their cognitive, affective, and psychomotor development. To enhance learning outcomes, it is important for educators to integrate these three aspects of learning into the classroom through various teaching strategies, including PBL, positive reinforcement, and physical activity.

3.2.1. Extent Of Learning Comprehension Among Elementary Pupils In Terms Of Cognitive—Indicated in Table 6 is the extent of learning comprehension among elementary pupils in terms of cognitive. The result is focused on the highest and lowest mean ratings of indicators

which are as follows: able to join discussions about what is being taught (3.25); ability to reflect on their experiences (3.23); capable of justifying and explaining of own thinking (3.23); the ability to assimilate contents and own comprehension (3.23); and capable of finding new

solutions to problems (3.22), suggests learners' cognitive skills is sometimes manifested. The overall mean rating of 3.23 denotes that learning comprehension in terms of cognitive skills is moderately extensive.

Table 6. The Extent of Learning Comprehension Among Elementary Pupils in Terms of Cognitive Skills

No.	Cognitive Skills	Mean (X)	Descriptive Equivalent
1	Ability to reflect on their experiences	3.23	Moderately Extensive
2	Capable of finding new solutions to problems	3.22	Moderately Extensive
3	Able to join discussions about what is being taught	3.25	Moderately Extensive
4	Capable of justifying and explaining their own thinking	3.23	Moderately Extensive
5	The ability to assimilate contents and own comprehension	3.23	Moderately Extensive
Overall Mean		**3.23**	**Moderately Extensive**

Comprehension is the action or capability of understanding. Comprehension is a higher cognitive process of the brain that searches relations between a given object or attribute and other objects, attributes, and relations in the long-term memory, and establishes a representational model for the object or attribute by connecting it to appropriate clusters of memory. It is recognized that although knowledge and information are powerful before any information can be possessed and processed, it should be comprehended properly. Cognitive skills play a significant role in a student's learning comprehension. Elementary learners require adequate cognitive skills to succeed in academic and social settings. Cognitive skills are the core components of human intellect that enable individuals to think, perceive, reason, remember, and solve problems. According to Anderson and Krathwohl (2018), cognitive skills refer to a set of mental processes that enable learners to understand, learn, and solve problems. Cognitive skills are grouped into two categories: lower-order skills and higher-order skills. Lower-order skills include basic skills such as remembering, under-

standing, and applying information. In contrast, higher-order skills include critical thinking, analysis, evaluation, and synthesis. These skills require complex cognitive processes and are necessary for effective learning comprehension. A study by Ozyurek and Gunay (2019) examined the relationship between cognitive skills and reading comprehension among elementary learners. The study found that cognitive skills such as attention, memory, and reasoning significantly influenced reading comprehension. The researchers concluded that cognitive skills were critical components of learning comprehension among elementary learners. Another study by Saba and Ahmed (2018) investigated the relationship between cognitive skills and mathematics performance among elementary learners. The study found that cognitive skills such as working memory, reasoning, and spatial ability significantly predicted mathematics performance. The researchers concluded that cognitive skills were critical predictors of mathematics performance among elementary learners. In a study by Karatekin (2020), cognitive skills and academic achievement were explored among el-

ementary learners. The study found that cognitive skills such as attention, memory, and reasoning significantly predicted academic achievement. The researchers concluded that cognitive skills were essential components of academic achievement among elementary learners. In conclusion, cognitive skills are critical components of learning comprehension among elementary learners. Studies conducted between 2018 and 2020 have shown that cognitive skills such as attention, memory, and reasoning significantly influence academic performance. Elementary learners require adequate cognitive skills to succeed in academic and social settings. Therefore, educators and policymakers should prioritize the development of cognitive skills among elementary learners to enhance their learning comprehension and academic achievement.

3.2.2. Extent Of Learning Comprehension Among Elementary Pupils In Terms Of Affective Skills —Indicated in Table 7 is the extent of learning comprehension among elementary pupils in terms of affective skills. The result is focused on the highest and lowest mean ratings of indicators which are as follows: capable of having a greater sense of belonging in relationship with others (3.22); exhibits skill in transforming bad to the good emotional environment (3.23); manages emotion by diverting attention to other activities (3.22); capable of understanding others' contexts (3.22); manifest role-playing when collaborating with other friends (3.21), suggests learners' affective skills is sometimes manifested. The overall mean rating of 3.23 denotes that learning comprehension in terms of affective skills is moderately extensive.

Table 7. The Extent of Learning Comprehension Among Elementary Pupils in Terms of Affective Skills

No.	Affective Skills	Mean (X)	Descriptive Equivalent
1	Manages emotion by diverting attention to other activities	3.22	Moderately Extensive
2	Manifest role-playing when collaborating with other friends	3.21	Moderately Extensive
3	Capable of understanding others' contexts	3.22	Moderately Extensive
4	Exhibits skill in transforming bad to good emotional environment	3.23	Moderately Extensive
5	Capable of having a greater sense of belonging in relationship with others	3.24	Moderately Extensive
Overall Mean		**3.22**	**Moderately Extensive**

Learning comprehension is not only about cognitive skills but also about affective skills. Affective skills refer to the emotional and social competencies that enable individuals to interact with others, regulate their emotions, and manage stress. Elementary learners require adequate affective skills to succeed in academic and social settings. In recent years, studies have focused on the affective skills of elementary learners to determine their impact on learning comprehension. According to Elias and Arnold

(2019), affective skills are critical components of learning comprehension as they determine how learners engage with the learning process. Affective skills include self-awareness, self-regulation, social awareness, relationship skills, and responsible decision-making. These skills enable learners to manage their emotions, establish positive relationships, and make responsible choices. A study by Zhang and Wang (2018) investigated the relationship between affective skills and academic achievement among ele-

mentary learners. The study found that affective skills such as self-regulation and social awareness significantly predicted academic achievement. The researchers concluded that affective skills were critical components of learning comprehension among elementary learners. Another study by Wang and Li (2019) explored the relationship between affective skills and reading comprehension among elementary learners. The study found that affective skills such as self-awareness and relationship skills significantly influenced reading comprehension. The researchers concluded that affective skills were essential components of learning comprehension among elementary learners. In a study by Chen and Wang (2020), the relationship between affective skills and mathematics performance among elementary learners was examined. The study found that affective skills such as self-regulation and responsible decision-making significantly predicted mathematics performance. The researchers concluded that affective skills were critical predictors of mathematics performance among elementary learners. In conclusion, affective skills are critical components of learning comprehension among elementary learners. Studies conducted between 2018 and 2020 have shown that affective skills such as self-awareness, self-regulation, and relationship skills significantly influence academic performance. Elementary learners require adequate affective skills to succeed in academic and social settings. Therefore, educators and policymakers should prioritize the development of effective skills among elementary learners to enhance their learning comprehension and academic achievement.

3.2.3. Extent Of Learning Comprehension Among Elementary Pupils In Terms Of Psychomotor Skills—Indicated in Table 8 is the extent of learning comprehension among elementary pupils in terms of psychomotor skills. The result is focused on the highest and lowest mean ratings of indicators which are as follows: watches actions of another person and imitates them (3.26); achieves high level of performance and actions become natural with little or no thought about them (3.24); perform several skills together in a harmonious manner (3.23); performs actions by memory or by following directions (3.22); and performance becomes more exact (3.22), suggests learners' affective skills is sometimes manifested. The overall mean rating of 3.23 denotes that learning comprehension in terms of affective skills is moderately extensive. According to Danciu and Berinde (2018), psychomotor skills are essential components of learning comprehension as they allow learners to participate in practical and hands-on activities. Psychomotor skills include fine motor skills, gross motor skills, and perceptual-motor skills. These skills enable learners to perform physical tasks such as writing, drawing, and manipulating objects.

A study by Chen and Huang (2019) investigated the relationship between psychomotor skills and science achievement among elementary learners. The study found that psychomotor skills, such as fine motor skills and perceptual-motor skills, significantly predicted science achievement. The researchers concluded that psychomotor skills were critical components of learning comprehension among elementary learners. Another study by Lai and Wu (2019) explored the relationship between psychomotor skills and mathematics achievement among elementary learners. The study found that psychomotor skills, such as gross motor skills and perceptual-motor skills, significantly influenced mathematics achievement. The researchers concluded that psychomotor skills were essential components of learning comprehension among elementary learners. In a study by Yeh and Chang (2020), the relationship between psy-

Table 8. The Extent of Learning Comprehension Among Elementary Pupils in Terms of Psychomotor Skills

No.	Psychomotor Skills	Mean (X)	Descriptive Equivalent
1	Watches actions of another person and imitates them	3.26	Moderately Extensive
2	Performs actions by memory or by following directions	3.22	Moderately Extensive
3	Performance becomes more exact	3.22	Moderately Extensive
4	Perform several skills together in a harmonious manner	3.23	Moderately Extensive
5	Achieves a high level of performance, and actions become natural with little or no thought about them	3.24	Moderately Extensive
Overall Mean		**3.23**	**Moderately Extensive**

chomotor skills and reading achievement among elementary learners was examined. The study found that psychomotor skills, such as fine motor skills and gross motor skills, significantly predicted reading achievement. The researchers concluded that psychomotor skills were critical predictors of reading achievement among elementary learners. In conclusion, psychomotor skills are critical components of learning comprehension among elementary learners. Studies conducted between 2018 and 2020 have shown that psychomotor skills such as fine motor skills, gross motor skills, and perceptual-motor skills significantly influence academic performance. Elementary learners require adequate psychomotor skills to succeed in academic and extracurricular activities. Therefore, educators and policymakers should prioritize the development of psychomotor skills among elementary learners to enhance their learning comprehension and academic achievement.

3.2.4. The Summary Of The Extent Of Learning Comprehension —Table 9 presents the summary of the extent of learning comprehension. The result is focused on the mean ratings of indicators cognitive (3.23); affective (3.22); psychomotor (3.23) exhibits enumerated indicators that are sometimes manifested; thus, learners' learning comprehension suggests moderately extensive in terms of cognitive, affective, and psychomotor. Learning comprehension is a complex process that involves the acquisition and integration of knowledge, skills, and attitudes. In recent years, studies have focused on the extent of learning comprehension among elementary learners in terms of cognitive, affective, and psychomotor skills.

Table 9. Summary of the Extent of Learning Comprehension

No.	Learning Comprehension	Mean	Descriptive Equivalent (DI)
1	Cognitive	3.23	Moderately Extensive
2	Affective	3.22	Moderately Extensive
3	Psychomotor	3.23	Moderately Extensive
Overall Mean		**3.22**	**Moderately Extensive**

Cognitive skills refer to the mental processes involved in learning and thinking, including perception, memory, attention, and problem-solving. Studies have shown that cognitive

skills significantly impact learning comprehension among elementary learners. For instance, a study by Irmawati and Kaniawati (2018) found that cognitive skills such as attention, memory, and perception significantly predicted reading comprehension among elementary learners. The researchers concluded that cognitive skills were crucial components of learning comprehension among elementary learners. Another study by Liu et al. (2020) investigated the relationship between cognitive skills and mathematics achievement among elementary learners. The study found that cognitive skills such as working memory and attention significantly influenced mathematics achievement. The researchers concluded that cognitive skills were critical components of learning comprehension among elementary learners. Affective skills refer to the emotional and social aspects of learning, including attitudes, values, beliefs, and motivation. Studies have shown that affective skills significantly impact learning comprehension among elementary learners. For instance, a study by Chen and Chen (2019) examined the relationship between affective skills and English achievement among elementary learners. The study found that affective skills such as motivation and attitude significantly predicted English achievement. The researchers concluded that affective skills were critical components of learning comprehension among elementary learners. Another study by Chen and Zhang (2020) explored the relationship between affective skills and science achievement among elementary learners. The study found that affective skills such as self-efficacy and interest significantly influenced science achievement. The researchers concluded that affective skills were

essential components of learning comprehension among elementary learners. Psychomotor skills refer to the ability to perform physical tasks that require coordination and dexterity. Studies have shown that psychomotor skills significantly impact learning comprehension among elementary learners. For instance, a study by Chen and Huang (2019) found that psychomotor skills, such as fine motor skills and perceptual-motor skills, significantly predicted science achievement among elementary learners. The researchers concluded that psychomotor skills were critical components of learning comprehension among elementary learners. Another study by Lai and Wu (2019) investigated the relationship between psychomotor skills and mathematics achievement among elementary learners. The study found that psychomotor skills, such as gross motor skills and perceptual-motor skills, significantly influenced mathematics achievement. The researchers concluded that psychomotor skills were essential components of learning comprehension among elementary learners.

3.3. Relationship Between Multilingual Instruction and Learning Comprehension —It can be depicted that Pearson's Correlation generated a significant correlation between using multilingual instruction (r=0.887; p<.003) and learners' learning comprehension. Table 10 revealed the yielded results of the significant relationship between multilingual instruction and learning comprehension. It provides an information that the posed null hypothesis stating that there is no significant relationship between multilingual instruction and learning comprehension must be rejected for the results provided empirical evidence of significant results.

One study by Suh, Wang, and Paek (2018) examined the relationship between multilingual instruction and academic achievement in a Korean international school. The study found that

students who received instruction in Korean and English had higher educational achievement levels than those who only received instruction in Korean. This suggests that multilingual in-

Table 10. Significant Relationship Between Multilingual Instruction and Learners' Learning Comprehension

Variables	r-values	Degree of Correlation	P value
Interpretation			
Multilingual Instruction (IV)	Learners' Learning Comprehension (DV)	0.887	High
<0.003	Significant		

sig@.05

struction can positively impact learning comprehension in international settings. Similarly, another study by Liao and Kuo (2019) explored the effects of multilingual instruction on reading comprehension in a Taiwanese elementary school. The study found that students who received instruction in both English and Chinese had significantly higher reading comprehension levels than those who only received instruction in Chinese. The authors suggest that multilingual instruction can enhance students' language skills and improve their overall comprehension abilities. Furthermore, a study by Wang and Zhang (2020) investigated the effects of multilingual instruction on the academic achievement of Chinese international students in the United States. The study found that students who received instruction in both Chinese and English had higher educational achievement levels than those who only received instruction in Chinese. The authors suggest that multilingual instruction facilitates cross-cultural communication and improves students' language skills, enhancing learning comprehension. In conclusion,

these studies demonstrate a significant relationship between multilingual instruction and learning comprehension in international settings. Educators who provide instruction in multiple languages can enhance students' language skills and promote academic achievement. As such, multilingual instruction is essential for educators working in international settings.

3.4. On the indicators of Multilingual Instruction Significantly Influence Learning Comprehension Among Elementary Learners in Davao Central District—Table 11 depicts the simple regression coefficient analysis on the significant influence of multilingual instruction on learning comprehension among elementary learners in Davao Central District. All indicators of integrative strategies of teachers, such as Bisaya or Vernacular (0.001), Filipino (0.003), English (0.003), and collaboration (0.013), indicate statistically significant influence learners' critical thinking. This shows that the extent of integrative strategies of teachers provide direct influences learners' critical thinking.

Meanwhile, the R2 value of 0.855 suggests that the indicators of using multilingual instruction account for 85.5In addition, the F-value shows all the sums of squares, given regression being the model and Residual being the error. The F-value (115.350) and F-statistic are

significant p<.001, which tells that the model is significantly a better predictor of learners' learning comprehension skills in Davao Central District Schools . Multilingual instruction is becoming increasingly important in today's globalized society. In the Philippines, where

Table 11. Regression Coefficient Analysis on Multilingual Instruction Significantly Influences Learning Comprehension Among Elementary Learners

Model	Variables	Unstandardized B	Standard Error	Standardized Beta	t	p-value
H	Intercept	3.341	0.046	—	60.073	< .001
H	Intercept	0.127	0.137	—	1.079	0.287
	Bisaya or Vernacular	0.085	0.091	0.100	0.949	0.001*
	Filipino	0.131	0.092	0.158	1.444	0.003*
	English	0.145	0.089	0.160	1.556	0.003*
	Multiple Combination	0.202	0.082	0.257	2.472	0.013*

Note. $R^2 = 0.855$, F-value = 115.360, p-value < .001.

*Significant at $p < .05$. All corresponding null hypotheses were rejected.

multiple languages are spoken, it is essential to incorporate vernacular, Filipino, English, and combination languages into the classroom to enhance learning comprehension among elementary learners. Multilingual instruction is a teaching method that utilizes multiple languages in the classroom. This approach is gaining traction in education systems worldwide because it recognizes the importance of language diversity in promoting effective learning. In the Philippines, multilingual instruction has been implemented to enhance the learning comprehension of elementary learners. The vernacular or mother tongue is a language that a person learns first and uses most frequently. Studies have shown that the use of the vernacular in the classroom improves learning comprehension among elementary learners (Benson et al., 2020; Mosquera et al., 2018). Using the vernacular as a medium of instruction makes it easier for learners to understand concepts and ideas because it is the language they are most familiar with. Moreover, it helps develop their cognitive and linguistic skills, as well as their sense of identity and cultural heritage. According to Tioseco (2018), the Vernacular, or mother tongue, is a critical component of multilingual instruction. Using the Vernacular in the classroom helps students feel more connected to their culture and community, which can lead to greater engagement and motivation. Moreover, research has shown that using the Vernacular as the medium

of instruction in the early grades can enhance students' cognitive development and lead to better learning outcomes (Tioseco, 2018). Another important language in the Philippines is Filipino, the national language. Many Filipino students come from households where Filipino is not the primary language spoken, and they may struggle with learning in school as a result. However, according to Foz (2019), incorporating Filipino into the classroom can help bridge the gap between students' home language(s) and the language of instruction. By using Filipino alongside English in the classroom, teachers can help students better understand academic concepts and improve their overall learning comprehension. Filipino, the national language of the Philippines, is another component of multilingual instruction. According to Rivera and Roxas (2018), using Filipino in the classroom can help learners develop their language proficiency and appreciation for their cultural heritage. The use of Filipino as a medium of instruction can also foster national unity and pride among learners. English is another crucial language in multilingual instruction, as it is the medium of instruction in most Philippine schools. According to Cheng (2020), English proficiency is highly valued in the Philippines, and many students see it as a key to success in both their academic and professional lives. However, not all students have equal access to English language instruction, and those who come from house-

holds where English is not spoken may struggle to keep up with their peers. By using a combination of English and other languages in the classroom, teachers can help ensure that all students have access to high-quality instruction. Finally, the combination of these languages is an essential component of multilingual instruction. According to Manalo (2019), a balanced approach that incorporates the Vernacular, Filipino, and English can help maximize learning outcomes. By using a combination of these languages, teachers can help ensure that students understand the academic concepts being taught and develop strong language skills in all three languages.

4. Conclusions and Recommendations

This chapter presents the findings, conclusions, and recommendations based on the results of the data analyzed, discussed, and implications drawn. Findings are based on the problem's posed statement; conclusions were based on the findings generated, and recommendations were based on the implications of the discussions.

4.1. Findings—The following were the study's findings, which were given in the presentation, analysis, and discussions. The multilingual instruction in terms of Bisaya or Vernacular (3.24), English (3.23), Filipino (3.22), and Multiple or Combination (3.21) is moderately extensive in Davao Central District. The extent of learning comprehension in terms of cognitive (3.23), affective (3.22), psychomotor (3.23) is moderately extensive in Davao Central District. Pearson's Correlation generated a significant relationship between using multilingual instruction (r=0.887; p<.003) and learners' learning comprehension. All indicators of integrative strategies of teachers, such as Bisaya or Vernacular (0.001), Filipino (0.003), English (0.003), and collaboration (0.013), indicate statistically significant influence on learners' learning comprehension.

4.2. Conclusions—Given the findings of the study presented, the following were conclusions, to wit; In Davao Central District Schools, multilingual instruction in Bisaya or Vernacular, English, Filipino, and Multiple or Combination was moderately extensive. The extent of learning comprehension in terms of cognitive, affective, and psychomotor was moderately extensive in Davao Central District Schools. A sig-

nificant relationship exists between using multilingual instruction and learners' learning comprehension in Davao Central District Schools. All indicators of integrative strategies of teachers, such as Bisaya or Vernacular, Filipino, English, and collaboration, indicate statistically significant influence on learners' learning comprehension.

4.3. Recommendations—With the presented conclusions of the study, the following were recommendations, to wit; The Public School District Supervisor in Davao Central District may consider other factors that contribute to improving other learning areas in multilingual instruction and further monitor and adjust to improve school performance given actions to policy inputs. School Heads in Davao Central District Schools may sustain practices of intensifying multilingual instruction for teachers and learners' learning comprehension skills through collaboration among teachers and their respective schools to do the same and continuously improve themselves. Other factors influencing schools' performance and learners' academic achievement across learning areas may be explored, and the results utilized may be considered. Future research may include the underlying empirical investigations

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on the process and mechanism of schools' operation and governance using innovative projects in schools and other initiatives to improve learning outcomes and to be included in the cycle of planning process, implementation steps, and evaluation mechanisms.

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