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# CURRENT TRENDS AND CHALLENGES IN THE TEACHING-LEARNING OF JUNIOR HIGH SCHOOL MATHEMATICS IN THE PRIVATE SCHOOLS IN THE SCHOOLS DIVISION OF THE CITY OF ILAGAN TOWARDS IMPROVED ACADEMIC PERFORMANCE

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## ABSTRACT

This study determined the current trends and challenges in the teaching-learning of Junior High School Mathematics in private schools in the Schools Division of the City of Ilagan toward improved academic performance. It employed a descriptive-correlational research design involving 317 student-respondents and 15 Mathematics teacher-respondents from private schools during School Year 2025–2026. Data were gathered through validated questionnaires and analyzed using frequency and percentage, weighted mean, ANOVA, and Pearson's r. Findings revealed that students and teachers perceived the extent of practice of curriculum utilization, teaching strategies, printed instructional materials, technology use, and assessment of learning as generally practiced to a great or very great extent. Assessment of learning emerged as the strongest area, while technology integration was practiced moderately, particularly in the use of digital assessment tools and computer-based learning resources. Students generally rated the challenges as less serious, whereas teachers identified curriculum utilization as a serious concern, particularly in relation to curriculum breadth, pacing, mastery of competencies, and learner readiness. Significant differences were found in students' perceptions when grouped according to sex, income, family arrangement, learning resources, and school size. Among teachers, salary, teaching experience, and related trainings significantly influenced perceived challenges. Academic performance in Mathematics was high, with most students classified as outstanding or very satisfactory. However, no significant relationship was found between teaching-learning practices, challenges, and academic performance. The study concludes that Mathematics instruction in the surveyed private

schools is generally effective, but improvement is needed in technology integration, curriculum pacing, instructional resources, and student-centered learning activities.

**Keywords:** *Junior High School Mathematics, teaching-learning trends, curriculum utilization, instructional materials, academic performance*

## INTRODUCTION

Mathematics is an essential subject in secondary education since it fosters critical thinking, reasoning, and problem-solving skills. Despite its crucial role, a number of secondary mathematics teachers and students still encounter significant challenges. These range from systemic problems like inadequate teacher preparation, curriculum misalignment, and lack of resources to student disengagement, low achievement, and anxiety with specific mathematical topics.

The mathematics curriculum aims to develop the skills and processes such as knowing and understanding, estimating, computing and solving, visualizing and modeling, representing and communicating, conjecturing, reasoning, proving and decision making, and applying and connecting. Further, it emphasizes attitudes and values of accuracy, creativity, objectivity, perseverance, and productivity. The curriculum encourages the use of technology aids as appropriate in the teaching of mathematics. The Mathematics curriculum is based on experiential and situated learning, reflective learning, constructivism, cooperative learning, and discovery and inquiry-based learning. The mathematics curriculum in the K to 12 Basic Education Curriculum has two objectives: critical thinking and problem solving. These twin goals are embedded in the curriculum with skills, processes, values, and attitudes of Filipino learners, which were given a great deal of consideration during their inception. There are five content areas in the mathematics curriculum: Numbers and Number Sense, Measurement, Geometry, Patterns and Algebra, and Probability and Statistics (K to 12 Curriculum Guide MATHEMATICS (Grade 1 to Grade 10), 2016).

Mathematics learners must demonstrate understanding and appreciation of key concepts and principles of mathematics as applied using appropriate technology in problem solving, critical thinking, communicating, reasoning, and making connections, representations, and decisions in real life.

The Philippines remains among the lowest- performing countries in the OECD's PISA 2022 survey for reading, mathematics, and science, scoring below the OECD average (for example only 16% of students reached Level 2 proficiency in mathematics compared to 69% average in OECD countries). Its share of top performers (Level 5 or 6) is almost non-existent, while many students score below minimum proficiency. Compared to past assessments, there has been only a slight improvement (e.g., mathematics increased from 353 in 2018 to 355 in 2022), but in all three subject domains, the Philippines lags significantly behind both OECD averages and other participating

countries, highlighting deep gaps in foundational learning achievement and systematic inequities (Chi, 2023).

Despite the education department's firestorm of reforms and preparations following a dismal showing in PISA 2018, less than a quarter of Filipino students who took the test in 2022 reached the minimum level of proficiency in all three subjects, math, reading, and science, according to PISA (Chi, 2023).

Understanding which problems appear in different situations and identifying trends that influence challenges and possible solutions in secondary mathematics education have become increasingly important to educational scholars and policymakers. For instance, limited teacher training and the misalignment between digital tools and pedagogy often hinder effective technology integration in mathematics instruction. In addition, students' learning of advanced mathematics may be affected when they enter secondary school with conceptual gaps and weak foundational skills. Recent studies on digital technology in mathematics education emphasize that technology must be meaningfully aligned with pedagogy and supported by teacher training to improve mathematics teaching and learning (Borba et al., 2016; Engelbrecht et al., 2020).

The utilization of suitable instructional materials, especially printed materials such as textbooks, workbooks, activity sheets, modules, handouts, and worksheets, further strengthens teaching strategies. These concrete tools help teachers systematically deliver lessons, reinforce mathematical ideas, and provide students with opportunities to practice and acquire new skills. When these resources are available, well-designed, and appropriately used, teachers can accommodate varied learning needs and improve students' comprehension of mathematical topics. This is supported by Niño and Lomibao (2026), who emphasized that instructional materials are essential components of the teaching-learning process and that contextually relevant, validated materials can enhance learner engagement, comprehension, and learning outcomes in mathematics.

Effective mathematics instruction requires not only curriculum implementation and instructional resources but also technology utilization and learning assessment. Technology integration involves incorporating technology-based practices into regular classroom instruction, including the use of computers, calculators, projectors, instructional software, online platforms, and multimedia presentations to improve teaching effectiveness and student engagement. In addition, assessment of learning uses tests, quizzes, performance tasks, and examinations to determine how well students have achieved learning objectives. Assessment also provides teachers with important information about students' academic progress and competency mastery, allowing them to make evidence-based instructional decisions. The National Center for Education Statistics explains that technology integration involves the use of technology in teaching and learning environments, while Black and Wiliam (2010) emphasized that classroom assessment can improve learning when used to provide feedback and guide instruction (National Center for Education Statistics, n.d.; Black & Wiliam, 2010).

Furthermore, continuing reforms in curriculum design, both locally and globally, reflect changes in teaching strategies that prioritize data literacy, mathematical modeling,

problem-solving, and real-world applications. However, these reforms do not always come with adequate teacher training and implementation support. Research emphasizes the importance of continuous professional development in strengthening mathematics teachers' pedagogical approaches, content knowledge, and ability to adapt to curriculum reforms. The OECD highlights that mathematics curricula are evolving to include competencies such as data literacy, computational thinking, problem-solving, and real-world applications, while TALIS 2018 emphasizes the role of continuous professional development in improving teachers' knowledge, skills, and instructional practices (OECD, 2025; OECD, 2019).

The researcher possesses the academic preparation and professional experience necessary to conduct the study entitled "Current Trends and Challenges in the Teaching-Learning in Junior High School Mathematics in the Private Schools in the Schools Division of the City of Ilagan, Towards Improved Academic Performance." Having served as a Junior High School Mathematics teacher in private schools, the researcher has acquired extensive experience in lesson delivery, student assessment, and classroom management. These experiences have provided meaningful insights into the actual challenges faced by mathematics teachers, including curriculum utilization, teaching strategies, instructional materials, use of technology, and assessment of learning (Lasam, 2026).

The researcher's participation in various seminars, workshops, and Learning Action Cell (LAC) sessions focused on mathematics pedagogy has further enhanced knowledge and competence in developing effective teaching strategies. Through active collaboration with fellow mathematics teachers and school administrators, the researcher has also gained awareness of current trends, policies, and best practices in mathematics instruction within private school settings. Such professional learning experiences are consistent with TALIS findings that professional development, collaboration, and continuous learning help strengthen teachers' instructional practices and professional competence (OECD, 2019; Lasam, 2026).

Grounded in these academic and professional experiences, the researcher is well-equipped to analyze and interpret the challenges, issues, and trends in teaching mathematics. This background validates the researcher's authority and credibility in undertaking the present study, ensuring that the findings and recommendations are anchored on authentic classroom observations and real educational contexts.

In light of this, determining the current trends and challenges in teaching-learning in Junior High School Mathematics in private schools within the Schools Division of the City of Ilagan, is essential to improved academic performance. Teachers and other stakeholders could implement focused solutions that enhanced classroom procedures and student results by identifying the most urgent challenges and current trends. In order to improve academic performance, this study aimed to examine the current trends and challenges in the teaching-learning of Mathematics.

## Research Questions

This study aimed to identify the current trends and challenges in the teaching-learning process in Junior High School Mathematics in the private schools in the Schools Division of the City of Ilagan, toward improved academic performance. Specifically, it aimed to answer the following questions.

1. What is the profile of the respondents?

Students

   1. Sex
   2. Grade Level
   3. Combined Family Monthly Income
   4. Family Arrangement
   5. Availability of Learning Resources at Home
      a. Printed
      b. Digital
   6. School Size

Teachers

   a. Age
   b. Monthly Salary
   c. Number of Years in Teaching
   d. Work Load
   e. Related Trainings Attended

2. To what extent do the respondents practice the current trends in the teaching-learning of Junior High School Mathematics in terms of:
   a. Curriculum Utilization
   b. Teaching Strategies
   c. Printed Instructional Materials
   d. Digital Instructional Materials
   e. Assessment of Learning
3. Is there a significant difference in the respondents' extent of practice on the current trends of Teaching-Learning in Junior High School Mathematics when grouped according to profile?
4. How serious are the challenges encountered by the respondents in the Teaching-Learning of Junior High School Mathematics in terms of:
   a. Curriculum Utilization
   b. Teaching Strategies
   c. Printed Instructional Materials
   d. Digital Instructional Materials
   e. Assessment of Learning
5. Is there a significant difference in the level of seriousness in the challenges encountered by the respondents when grouped according to profile?
6. What is the academic performance of the Junior High School in Mathematics?

7. Is there a significant relationship between and among the extent of practice on the current trends and challenges in the Teaching-Learning of Mathematics and the academic performance of learners?

## METHODOLOGY

### Research Design

This study utilizes a descriptive design. Descriptive design is a methodological approach that seeks to depict the characteristics of a phenomenon or subject under investigation. In scientific inquiry, it serves as a foundational tool for researchers aiming to observe, record, and analyze the intricate details of a particular topic. This method provides a rich and detailed account that aids in understanding, categorizing, and interpreting the subject matter (Singh, 2023). According to McBurney and White (2009), research investigations that seek to produce static images of circumstances and establish the relationship between various variables employed the descriptive design.

The descriptive aspect will determine the current trends and challenges in the teaching-learning in Junior High School Mathematics. At the same time, the correlational component will examine the relationship between respondents' profiles, respondents' practice on current trends, challenges in teaching-learning in the Junior High School Mathematics, and academic performance in teaching-learning in the Junior High School Mathematics. This design is appropriate since it aims to describe the current teaching conditions and explore potential relationships among the variables.

### Locale of the Study

The study was conducted in private schools offering Junior High School in the Schools Division of the City of Ilagan during School Year 2025–2026. The participating urban schools were Casa Del Niño Montessori School of Ilagan, Top Achievers Private School, Inc. (TAPS), and Saint Ferdinand College–Ilagan (SFC), while the rural schools were Central Isabela Christian Academy, Inc. (CICA) and Miracle Light Christian Academy, Inc. (MLCA). These schools offer programs from Pre-Kindergarten or Pre-School to Senior High School, with SFC extending to college. They were selected for varied size, resources, and teaching environments, offering insight into Mathematics teaching practices and challenges.

### Selection and Description of Respondents

The respondents of this study were the Junior High School students and teachers from the aforementioned private schools. Simple Random Sampling is used for the students, and purposive sampling is used for the teachers since only those teaching mathematics at the Junior High School are qualified to participate. The respondents vary in terms of students' sex, grade level, combined family monthly income, family arrangement, availability of learning resources at home, and school size, and teachers'

age, monthly salary, number of years in teaching, workload, and related trainings attended to ensure that the data captures different perspectives.

The breakdown of the number of respondents per school is shown in the table below. This ensures that the data collected represents mathematics teachers from each school fairly.

**Table 1**
**Frequency Distribution of Respondents**

| SCHOOL | Student | | | | Teacher | | |
|---|---|---|---|---|---|---|---|
| | Grade Level | Population | Sample | Frequency | Population | Sample | Frequency |
| Casa Del Niño Montessori School of Ilagan | 7 | 33 | 7 | 28 | 3 | 3 | 3 |
| | 8 | 33 | 7 | | | | |
| | 9 | 33 | 7 | | | | |
| | 10 | 32 | 7 | | | | |
| Central Isabela Christian Academy, Inc. (CICA) | 7 | 153 | 32 | 107 | 3 | 3 | 3 |
| | 8 | 138 | 28 | | | | |
| | 9 | 99 | 20 | | | | |
| | 10 | 128 | 27 | | | | |
| Miracle Light Christian Academy, Inc. (MLCA) | 7 | 46 | 10 | 22 | 1 | 1 | 1 |
| | 8 | 24 | 5 | | | | |
| | 9 | 15 | 3 | | | | |
| | 10 | 21 | 4 | | | | |
| Saint Ferdinand College – Ilagan (SFC) | 7 | 194 | 40 | 142 | 3 | 5 | 5 |
| | 8 | 132 | 27 | | | | |
| | 9 | 168 | 35 | | | | |
| | 10 | 191 | 40 | | | | |
| Top Achievers Private School, Inc. (TAPS) | 7 | 36 | 7 | 18 | 3 | 3 | 3 |
| | 8 | 24 | 5 | | | | |
| | 9 | 15 | 3 | | | | |
| | 10 | 14 | 3 | | | | |

## Data Gathering Procedure

A formal letter was forwarded to the Schools Division Superintendent (SDS) through proper channels to seek permission to conduct the study among the selected private schools. Subsequently, formal letters were sent to the school administrators requesting approval to involve their mathematics teachers and students as respondents. Prior to administration, the research questionnaire was subjected to validation by Dr. Joseph Uania, Education Program Supervisor- Mathematics, to ensure its validity and reliability. Upon approval, the questionnaires were personally distributed to the identified respondents. After the prescribed period, the accomplished questionnaires were retrieved. The collected data were then encoded, tabulated, and carefully checked for accuracy before being subjected to appropriate statistical analysis. All information gathered was treated with utmost confidentiality and was used solely for academic and research purposes.

## Statistical Treatment of Data

To analyze the data for each of the questions raised in the study, the following statistics will be used:

Frequency and Percentage Count. This was used to analyze the data on profiles of the respondents in terms of students' sex, grade level, combined family monthly income, family arrangement, availability of learning resources at home, and school size, and teachers' age, monthly salary, number of years in teaching, workload, and related training attended.

Weighted Mean. This was used to determine the extent of its effect and identify the most common concerns and emerging trends.

ANOVA**.** This statistical tool was used to determine if there are significant differences between the respondents' extent of practice on the current trends of Teaching-Learning in Junior High School Mathematics when grouped according to profile, and the challenges encountered by the respondents when grouped according to profile.

Pearson-r. This was used to determine the significant relationship between and among the extent of practice on the current trends and challenges in the Teaching-Learning of Mathematics and the academic performance of learners.

## RESULTS AND DISCUSSION

### a. Students

**Table 1-a**
**Frequency Distribution of the Profile of the Student-Respondents in Terms of their Sex**

| **Sex** | Frequency | Percent |
|---|---|---|
| MALE | 104 | 32.8 |
| FEMALE | 213 | 67.2 |
| Total | 317 | 100.0 |

Out of the 317 student-respondents, 213 or 67.2% are female, while 104 or 32.8% are male. This indicates that majority of the respondents are female students. Supported by a report that Filipino women are enrolled in high school at significantly higher rates than men (Reysio-Cruz, 2019). The higher number of female respondents indicates that engagement, participation patterns, and learning preferences in Junior High School Mathematics may primarily reflect the viewpoints of female students.

**Table 2-a**
**Frequency Distribution of the Profile of the Student-Respondents in Terms of Their Grade Level**

| **Grade Level** | Frequency | Percent |
|---|---|---|
| GRADE 7 | 96 | 30.3 |
| GRADE 8 | 72 | 22.7 |
| GRADE 9 | 68 | 21.5 |
| GRADE 10 | 81 | 25.6 |
| Total | 317 | 100.0 |

The distribution of respondents shows that Grade 7 had the highest number of students with 96 or 30.3%, followed by Grade 10 with 81 or 25.6%, Grade 8 with 72 or 22.7%, and Grade 9 with 68 or 21.5%. This pattern suggests challenges in maintaining consistent enrollment as students move through grade levels. The decrease in Grades 8 and 9 may indicate declining motivation, learning difficulties in Mathematics, or limited academic and emotional support, which Rumberger (2011) identified as factors affecting student retention. The findings also align with Childhope Philippines (2024), which noted that grade-level transitions are critical stages where learners become more vulnerable to dropping out due to adjustment difficulties, academic pressure, and increasing subject complexity.

**Table 3-a**
**Frequency Distribution of the Profile of the Student-Respondents in Terms of the Combined Family Monthly Income**

| **Combine Family Monthly Income** | Frequency | Percent |
|---|---|---|
| BELOW 10, 000 | 87 | 27.4 |
| 10,001 - 20,000 | 66 | 20.8 |
| 20,001 - 30,000 | 61 | 19.2 |
| 30,001 - AND ABOVE | 103 | 32.5 |
| Total | 317 | 100.0 |

The family income distribution shows socioeconomic diversity among the respondents, with 103 students or 32.5% reporting a combined monthly income of ₱30,001 and above, followed by 87 students or 27.4% from families earning below ₱10,000. This indicates that a considerable number of learners come from low-income households and may face financial challenges in accessing quality private education. In this context, the Educational Service Contracting (ESC) Program is highly relevant because it grants tuition subsidies to eligible incoming Grade 7 learners who enroll in participating private junior high schools. The subsidy is intended to support students' access to private junior high school education and lessen the educational expenses shouldered by learners and their families (Department of Education, 2018; Private Education Assistance Committee, n.d.).

Family income may also affect access to learning resources, technology, and tutorial support, which are linked to academic performance (Castillo et al.,2025).

**Table 4-a**
**Frequency Distribution of the Profile of the Student-Respondents in Terms of the Family Arrangement**

| **Family Arrangement** | Frequency | Percent |
|---|---|---|
| LIVING WITH BOTH PARENTS | 201 | 63.4 |
| LIVING WITH ONE PARENT | 45 | 14.2 |
| LIVING WITH RELATIVES/GUARDIANS | 63 | 19.9 |
| OTHERS | 8 | 2.5 |
| Total | 317 | 100.0 |

Most students, 201 or 63.4%, are living with both parents. Meanwhile, 45 students (14.2%) live with one parent, 63 students (19.9%) live with relatives or guardians, and 8 students (2.5%) reported other arrangements.

A study by Pinatil et al. (2022) also found a significant relationship between the level of parental involvement and the academic performance of the student. Thus, the more the parents are involved in the school life of their children, the better their academic performance. Living arrangements may affect the level of academic supervision and emotional support students receive at home. Students living with both parents may have more structured guidance, which could positively influence academic performance in Mathematics.

**Table 5-a**
**Frequency Distribution of the Profile of the Student- Respondents in Terms of the Availability of Printed Learning Resources at Home**

| **Availability of Learning Resources at Home** | Frequency | Percent |
|---|---|---|
| VERY ADEQUATE | 68 | 34.2 |
| ADEQUATE | 115 | 57.8 |
| LESS ADEQUATE | 15 | 7.5 |
| NOT AVAILABLE | 1 | .5 |
| Total | 199 | 100.0 |

Table 5-a shows that most respondents have sufficient printed learning resources at home. Specifically, 115 respondents or 57.8% reported adequate resources, while 68 or 34.2% indicated very adequate access to materials such as books, modules, and worksheets. Only 15 respondents or 7.5% reported less adequate access, and 1 or 0.5% had no printed resources. Overall, the findings suggest that printed materials at home support students' learning and academic development, although a small group still needs targeted assistance. This supports Lehrl et al. (2020), who emphasized that access to learning materials, learning activities, and supportive home interactions contribute to children's educational development, skills practice, concept reinforcement, and improved academic outcomes.

**Table 6-a**
**Frequency Distribution of the Profile of the Student-Respondents in Terms of the Availability of Digital Learning Resources at Home**

| **Availability of Learning Resources at Home** | Frequency | Percent |
|---|---|---|
| VERY ADEQUATE | 30 | 25.4 |
| ADEQUATE | 77 | 65.3 |
| LESS ADEQUATE | 10 | 8.5 |
| NOT AVAILABLE | 1 | .8 |
| Total | 118 | 100.0 |

Table 6-a shows that most respondents have adequate access to digital learning resources at home. Specifically, 77 respondents or 65.3% reported adequate gadget availability, while 30 or 25.4% indicated very adequate access to devices such as smartphones, tablets, or computers. Meanwhile, 10 respondents or 8.5% reported less adequate access, and 1 or 0.8% had no available gadgets. Overall, the findings suggest that most students can use digital devices to access learning materials, communicate with teachers, and complete school tasks, although a small group still faces limited access. This supports Skvarc et al. (2025), who emphasized that ICT-rich home environments provide opportunities for technology-assisted learning, including reading, writing, and problem-solving activities that support academic development.

**Table 7-a**
**Frequency Distribution of the Profile of the Student-Respondents in Terms of the School Size**

| **School Size** | Frequency | Percent |
|---|---|---|
| SMALL | 22 | 6.9 |
| MEDIUM | 268 | 84.5 |
| LARGE | 27 | 8.5 |
| Total | 317 | 100.0 |

Most respondents (84.5%) come from medium-sized schools, while 8.5% are from large schools and 6.9% from small schools. This indicates that the study's findings are largely reflective of the conditions in medium-sized private schools in the Schools Division of the City of Ilagan. School size may influence class size, teacher-student ratio, and availability of instructional facilities, which are relevant factors in examining teaching-learning effectiveness in Mathematics. The school typology is indicated in DO No. 19, s. 2016 classifies schools based on enrollment such as small (less than 440 learners), medium (441–840), large (841–1,240), and very large (1,240 and above) (Department of Education, 2021). This alignment indicates that the study's results are predominantly shaped by the context of medium-sized schools as defined in the typology, suggesting that the results largely reflect the conditions and educational environment commonly found in medium-sized private schools in the Schools Division of the City of Ilagan. The size of the school may influence factors such as class size, teacher-student ratio, and availability of instructional resources, which are important considerations in examining teaching-learning effectiveness in Mathematics.

## b. Teachers

**Table 1-b**
**Frequency Distribution of the Profile of the Teacher-Respondents in Terms of Age**

| **Age:** | Frequency | Percent |
|---|---|---|
| 20-25 | 1 | 6.7 |
| 26-30 | 7 | 46.7 |
| 31-35 | 3 | 20.0 |
| 36-40 | 4 | 26.7 |
| Total | 15 | 100.0 |

The age distribution of teacher-respondents shows that the largest group, 46.7%, belongs to the 26–30 age range, followed by 36–40 years old with 26.7%, 31–35 years old with 20.0%, and 20–25 years old with 6.7%. This indicates a mix of young and moderately experienced teachers. According to OECD (2019), younger teachers are often more open to innovation, technology integration, and student-centered strategies, while experienced teachers contribute classroom management and pedagogical depth. Thus, varied age groups may promote a balance between innovative and experience-based Mathematics instruction. However, Saldevia and Pedroso (2025) emphasized that teacher retention in private schools is affected by compensation, workload, working conditions, administrative support, recognition, and opportunities for professional growth.

**Table 2-b**
**Frequency Distribution of the Profile of the Teacher-Respondents in Terms of the Monthly Salary**

| **Monthly Salary** | Frequency | Percent |
|---|---|---|
| BELOW 10,000 | 1 | 6.7 |
| 10,000 -P 14,999 | 1 | 6.7 |
| 15,000 - 19,999 | 2 | 13.3 |
| 20,000 - 24,999 | 11 | 73.3 |
| Total | 15 | 100.0 |

Most teachers (73.3%) earn ₱20,000–₱24,999 monthly. Smaller percentages earn ₱15,000–₱19,999 (13.3%), ₱10,000–₱14,999 (6.7%), and below ₱10,000 (6.7%).

Salary levels may influence teacher motivation, job satisfaction, and professional commitment. The OECD (2019) reported that teacher salary levels are positively associated with job satisfaction and professional commitment. Countries that provide competitive compensation tend to retain motivated and effective teachers, which contributes to improved student performance. This supports the claim of OECD that adequate compensation may enhance instructional quality and academic outcomes in Mathematics. Adequate compensation may contribute to better instructional quality, which is vital in improving students' academic performance in Mathematics.

**Table 3-b**
**Frequency Distribution of the Profile of the Teacher-Respondents in Terms of the Number of Years in Teaching**

| **Number of Years in Teaching** | Frequency | Percent |
|---|---|---|
| LESS THAN 1 YEAR | 2 | 13.3 |
| 1-5 YEAR | 6 | 40.0 |
| 6-10 YEAR | 7 | 46.7 |
| Total | 15 | 100.0 |

The teaching experience profile shows that seven teachers or 46.7% have 6–10 years of experience, six or 40.0% have 1–5 years, and two or 13.3% have less than one year. This indicates that most teachers possess moderate to substantial experience, which is important in managing classroom challenges, applying effective strategies, and addressing diverse learner needs in Mathematics. The findings are supported by Perdana et al. (2023), whose study, based on Herzberg's motivation-hygiene theory, found that private school teachers generally demonstrate high intrinsic motivation through achievement, growth, recognition, responsibility, and meaningful work. However, their study also emphasized that motivation alone cannot ensure retention, as salary, working conditions, and better opportunities strongly affect teachers' decisions to stay or leave.

**Table 4-b**
**Frequency Distribution of the Profile of the Teacher-Respondents in Terms of the Workload (Teaching Load per Week)**

| **Workload (Teaching Load per Week):** | Frequency | Percent |
|---|---|---|
| LESS THAN 18 HR | 7 | 46.7 |
| 18-24 HRS | 4 | 26.7 |
| 25-30 HRS | 2 | 13.3 |
| MORE THAN 30 HRS | 2 | 13.3 |
| Total | 15 | 100.0 |

The workload distribution shows that 46.7% of teachers have less than 18 teaching hours per week, 26.7% teach 18–24 hours, while 13.3% each teach 25–30 hours and more than 30 hours weekly. A manageable teaching load allows teachers more time for lesson preparation, assessment, remediation, and professional development, while heavier loads may affect teaching quality and work-life balance. This is supported by Ancho and Bongco (2019), who noted that Filipino teachers often work beyond official hours and experience workload-related challenges. Likewise, DepEd Order No. 005, s. 2024 recognizes teachers' instructional and ancillary duties, emphasizing that excessive teaching loads require compensation and may influence teacher satisfaction, stress, and retention (Department of Education, 2024; Department of Education, n.d.).

**Table 5-b**
**Frequency Distribution of the Profile of the Teacher- Respondents in Terms of the Related Trainings Attended (Last 3 Years)**

| **Related Trainings Attended (Last 3 Years):** | Frequency | Percent |
|---|---|---|
| NONE | 2 | 13.3 |
| 1-2 TRAINING | 3 | 20.0 |
| 3-4 TRAINING | 8 | 53.3 |
| 5 MORE | 2 | 13.3 |
| Total | 15 | 100.0 |

Eight teachers (53.3%) attended 3–4 related trainings, three teachers (20.0%) attended 1–2 trainings, two teachers (13.3%) attended five or more trainings, and two teachers (13.3%) did not attend any training. The study of Sacote et al. (2025) conducted in the Philippines explored the role of professional development—including trainings, seminars, and mentoring—on teachers' teaching practices. Findings highlighted the importance of these professional development experiences in improving instructional strategies and classroom management approaches. This aligns with the observation that teachers who attended more trainings (3–4) in your study are likely to demonstrate higher proficiency in teaching practices. This finding indicates that most teachers actively participate in professional development activities. Continuous training is essential in keeping teachers updated with current trends, such as technology integration, learner-centered strategies, and innovative pedagogical approaches in Mathematics education.

## 2. To what extent do the respondents practice the current trends in the teaching-learning of Junior High School Mathematics in terms of:

### 1. Curriculum Utilization

**Table 2-A**
**Mean Distribution of the Respondents**
**Extent of Practice on Curriculum Utilization**

| **A. Curriculum Utilization** | | | **Students** | | **Teachers** | |
|---|---|---|---|---|---|---|
| | | | Mean | Description | Mean | Description |
| **S** | 1. | I understand the mathematics lessons because they are aligned with the prescribed curriculum. | 3.33 | Very Great Extent | | |
| **T** | | I align my Mathematics lessons with the prescribed curriculum guide. | | | 4.00 | Very Great Extent |
| **S** | 2. | I am taught Mathematics topics in the proper sequence based on the curriculum guide. | 3.52 | Very Great Extent | | |
| **T** | | I follow the proper sequence of topics as stated in the curriculum. | | | 4.00 | Very Great Extent |
| **S** | 3. | I experience Mathematics lessons that focus on the required learning competencies. | 3.48 | Very Great Extent | | |
| **T** | | I focus my instruction on the most essential learning competencies. | | | 3.93 | Very Great Extent |

| | | | | | | |
|---|---|---|---|---|---|---|
| **S** | 4. | I apply what I learn in Mathematics to real-life situations as emphasized in the curriculum. | 3.12 | Great Extent | | |
| **T** | | I integrate real-life applications of Mathematics as emphasized in the curriculum. | | | 3.80 | Very Great Extent |
| **S** | 5. | I am exposed to activities that develop my reasoning and logical thinking skills as required by the curriculum. | 3.23 | Great Extent | | |
| **T** | | I adjust lesson pacing to ensure mastery of required competencies. | | | 4.00 | Very Great Extent |
| **S** | 6. | I apply what I learn in Mathematics to real-life situations as emphasized in the curriculum. | 3.05 | Great Extent | | |
| **T** | | I use the curriculum as a basis for preparing my lesson plans. | | | 3.93 | Very Great Extent |
| **S** | 7. | I am assessed through quizzes, tasks, and exams that match the curriculum standards. | 3.37 | Very Great Extent | | |
| **T** | | I ensure that my classroom activities reflect curriculum goals. | | | 3.93 | Very Great Extent |
| **S** | 8. | I receive feedback on my performance based on curriculum-based learning competencies. | 3.19 | Great Extent | | |
| **T** | | I design learning tasks that develop learners' reasoning and problem-solving skills. | | | 3.93 | Very Great Extent |
| **S** | 9. | I experience group activities in Mathematics that support curriculum goals. | 3.38 | Very Great Extent | | |
| **T** | | I modify curriculum content to address students' learning needs and abilities. | | | 3.93 | Very Great Extent |
| **S** | 10. | I feel that the mathematics curriculum helps me build confidence in learning the subject. | 3.42 | Very Great Extent | | |
| **T** | | I regularly review the curriculum guide to improve my teaching practices. | | | 3.80 | Very Great Extent |
| **Mean** | | | **3.31** | **Very Great Extent** | **3.93** | **Very Great Extent** |

The data show that both students and teachers perceived curriculum utilization in Mathematics as highly practiced, mostly rated to a Very Great Extent. Students gave the highest rating to proper sequencing of topics (M=3.52) and the lowest to applying Mathematics to real-life situations (M=3.05). Teachers rated curriculum alignment, sequencing, and pacing highest (M=4.00), while real-life application and curriculum review received the lowest rating (M=3.80), though still very high.

Overall, teachers rated implementation higher (M=3.93) than students (M=3.31), indicating a perception gap and the need to strengthen student-centered and real-life applications. This supports Schmidt and Houang (2012), OECD (2019), Squires (2012), and Allensworth et al. (2021), who emphasized curriculum coherence, alignment, sequencing, and competency-based instruction.

## 2. Teaching Strategies

**Table 2-B**
**Mean Distribution of the Respondents**
**Extent of Practice on Teaching Strategies**

| B. Teaching Strategies | | | Students | | Teachers | |
|---|---|---|---|---|---|---|
| | | | Mean | Description | Mean | Description |
| S | 1. | I understand Mathematics lessons because my teacher explains the concepts clearly. | 3.69 | Very Great Extent | | |
| T | | I use a combination of lecture, guided practice, group work, and individual activities to address the different learning styles of students. | | | 4.00 | Very Great Extent |
| S | 2. | I experience step-by-step demonstrations when solving Mathematics problems. | 3.65 | Very Great Extent | | |
| T | | I explain Mathematics concepts clearly using step-by-step procedures. | | | 3.73 | Very Great Extent |
| S | 3. | I am encouraged to ask questions during Mathematics lessons. | 3.26 | Very Great Extent | | |
| T | | I encourage students to ask questions during Mathematics lessons. | | | 3.87 | Very Great Extent |
| S | 4. | I participate in discussions that help me understand Mathematics concepts better. | 3.31 | Very Great Extent | | |
| T | | I facilitate class discussions to deepen students' understanding of concepts. | | | 3.93 | Very Great Extent |
| S | 5. | I experience varied teaching strategies (lecture, discussion, activities) in the mathematics class. | 3.54 | Very Great Extent | | |
| T | | I use problem-solving approaches in teaching Mathematics. | | | 3.93 | Very Great Extent |
| S | 6. | I am given practice exercises that help reinforce the lesson. | 3.47 | Very Great Extent | | |
| T | | I provide guided practice before allowing independent work. | | | 3.93 | Very Great Extent |
| S | 7. | I experience group work or collaborative learning activities in Mathematics class. | 3.34 | Very Great Extent | | |
| T | | I incorporate collaborative or group activities in my Mathematics classes. | | | 3.40 | Very Great Extent |
| S | 8. | I experience the use of visual aids (charts, diagrams, models) during Mathematics lessons. | 3.38 | Very Great Extent | | |
| T | | I use real-life examples to make Mathematics lessons more meaningful. | | | 3.80 | Very Great Extent |
| S | 9. | I am encouraged to explain my answers or solutions in class. | 3.09 | Great Extent | | |
| T | | I provide additional explanations, examples, or practice activities when students' performance indicates low mastery of the lesson. | | | 4.00 | Very Great Extent |
| S | 10. | I feel confident participating in Mathematics activities and discussions. | 3.13 | Great Extent | | |
| T | | I review students' assessment results to evaluate the effectiveness of my teaching strategies. | | | 3.80 | Very Great Extent |
| **Mean** | | | **3.39** | **Very Great Extent** | **3.84** | **Very Great Extent** |

Table 2-B shows that both students and teachers perceived Mathematics teaching strategies as practiced to a Very Great Extent. Students rated clear explanations highest (M=3.69), while explaining answers (M=3.09) and confidence in participation (M=3.13) received the lowest ratings, suggesting the need to strengthen student articulation and active participation. Teachers rated clear explanations and additional support highest (M=4.00), while collaborative activities received the lowest rating (M=3.40), indicating that group learning is less emphasized. Overall, teachers rated their practices higher (M=3.84) than students (M=3.39), showing a perception gap. This supports Hattie (2018), who emphasized teacher clarity as a strong influence on achievement, while also highlighting the need to encourage reasoning, confidence, and participation in Mathematics classrooms.

### 3. Printed Instructional Materials

**Table 2-C**
**Mean Distribution of the Respondents**
**Extent of Practice on Printed Instructional Materials**

| C. Printed Instructional Materials | | | Students | | Teachers | |
|---|---|---|---|---|---|---|
| | | | Mean | Description | Mean | Description |
| **S** | 1. | I use Mathematics textbooks that are clear and easy to understand. | 3.13 | Great Extent | | |
| **T** | | I use textbooks that are aligned with the mathematics curriculum. | | | 3.87 | Very Great Extent |
| **S** | 2. | I am provided with modules or worksheets that help me practice Mathematics lessons. | 2.95 | Great Extent | | |
| **T** | | I prepare and use worksheets to reinforce lesson concepts. | | | 3.47 | Very Great Extent |
| **S** | 3. | I experience the use of visual aids (charts, diagrams, graphs) during Mathematics lessons. | 3.27 | Very Great Extent | | |
| **T** | | I utilize visual aids such as charts, graphs, and diagrams in teaching. | | | 3.67 | Very Great Extent |
| **S** | 4. | I experience the use of manipulatives or models in learning Mathematics. | 3.13 | Great Extent | | |
| **T** | | I use manipulatives or concrete materials to explain abstract concepts. | | | 3.33 | Very Great Extent |
| **S** | 5. | I experience the use of appropriate instructional materials (print, visual, and digital) during Mathematics class discussions and activities. | 3.27 | Very Great Extent | | |
| **T** | | I develop instructional materials such as print, visual, and digital materials suited to the learners' level. | | | 3.73 | Very Great Extent |
| **S** | 6. | I experience the use of varied instructional materials (print, visual, and digital) that make Mathematics lessons more engaging. | 3.24 | Great Extent | | |
| **T** | | I integrate printed and digital materials during Mathematics lessons. | | | 3.27 | Very Great Extent |
| **S** | 7. | I use review worksheets and summary notes that help me recall previous Mathematics lessons. | 3.43 | Very Great Extent | | |
| **T** | | I ensure that instructional materials are clear, readable, and well-organized. | | | 3.87 | Very Great Extent |

| | | | | | | |
|---|---|---|---|---|---|---|
| **S** | 8. | I use review modules and worksheets that help me prepare for Mathematics quizzes and examinations. | 3.37 | Very Great Extent | | |
| **T** | | I use instructional materials to support independent learning among students. | | | 3.67 | Very Great Extent |
| **S** | 9. | I experience the use of worksheets, modules, and exercises that help me learn Mathematics independently. | 3.30 | Very Great Extent | | |
| **T** | | I select materials such as review modules and worksheets that help students practice and master Mathematics skills. | | | 3.67 | Very Great Extent |
| **S** | 10. | I feel that the instructional materials I use, such as worksheets, modules, and examples, help me perform better in Mathematics. | 3.43 | Very Great Extent | | |
| **T** | | I update my instructional materials, such as worksheets, modules, and examples, to make lessons more engaging and effective. | | | 3.53 | Very Great Extent |
| **Mean** | | | **3.25** | **Very Great Extent** | **3.61** | **Very Great Extent** |

Table 2-C shows that both students and teachers perceived the use of printed instructional materials in Mathematics as practiced to a Very Great Extent. Students rated review worksheets and summary notes highest (M=3.43), indicating that these materials support retention, while the provision of practice modules was lowest (M=2.95), suggesting limited access. Teachers rated curriculum-aligned textbooks and well-organized materials highest (M=3.87), while integrating printed and digital materials was lowest (M=3.27). Overall, teachers rated their practices higher (M=3.61) than students (M=3.25), showing a slight perception gap. This supports Niño and Lomibao (2026), who emphasized the value of instructional materials in improving comprehension, and Kaufman et al. (2020), who linked standards-aligned materials to improved learning outcomes.

## 4. Use of Technology

**Table 2-D**
**Mean Distribution of the Respondents**
**Extent of Practice on the Digital Learning Materials**

| **D. Digital Learning Materials** | | | **Students** | | **Teachers** | |
|---|---|---|---|---|---|---|
| | | | Mean | Description | Mean | Description |
| **S** | 1. | I utilize calculators as a tool to assist me in solving mathematical problems. | 3.64 | Very Great Extent | 2.53 | Great Extent |
| **T** | | I use technology such as GeoGebra, Kahoot, and virtual manipulatives to enhance the delivery of Mathematics lessons. | | | | |
| **S** | 2. | I access Mathematics learning materials through laptops or desktop computers. | 2.60 | Great Extent | 4.00 | Very Great Extent |
| **T** | | I utilize presentation tools such as PowerPoint or multimedia in teaching. | | | | |
| **S** | 3. | I watch Mathematics video lessons using tablets or smartphones. | 3.03 | Great Extent | 3.80 | Very Great Extent |

| | | | | | | |
|---|---|---|---|---|---|---|
| **T** | | I use online resources to supplement Mathematics instruction. | | | | |
| **S** | 4. | I search for Mathematics websites or videos to help me understand challenging lessons. | 3.03 | Great Extent | 2.60 | Great Extent |
| **T** | | I integrate educational platforms (e.g., Google Classroom, Quizizz, Kahoot) in my classes. | | | | |
| **S** | 5. | I rely on graphing tools or software to plot and analyze Mathematics problems. | 2.83 | Great Extent | 2.87 | Great Extent |
| **T** | | I use digital tools to demonstrate graphs such as Desmos, GeoGebra, and Mathsbot, and mathematical models. | | | | |
| **S** | 6. | I practice solving Mathematics problems using educational apps such as Photomath, Mathway, and Symbolab. | 2.62 | Great Extent | 4.00 | Very Great Extent |
| **T** | | I encourage students to use technology responsibly for learning Mathematics. | | | | |
| **S** | 7. | I check my answers using online calculation or conversion tools | 2.81 | Great Extent | 2.87 | Great Extent |
| **T** | | I use video lessons or tutorials to reinforce difficult topics. | | | | |
| **S** | 8. | I study Mathematics using e-books, PDF files, or online learning modules. | 2.61 | Great Extent | 2.20 | Low Extent |
| **T** | | I apply technology such as Kahoot and Quizizz to assess students' understanding of lessons. | | | | |
| **S** | 9. | I watch video tutorials on YouTube to better understand step-by-step solutions in Mathematics. | 3.04 | Great Extent | 2.80 | Great Extent |
| **T** | | I use mathematical software or applications such as Desmos and GeoGebra to explain complex concepts. | | | | |
| **S** | 10. | I use virtual manipulatives and online models, such as interactive shapes, algebra tiles, and graphing tools, to explore, visualize, and understand specific Mathematics concepts and problems. | 2.96 | Great Extent | 3.93 | Very Great Extent |
| **T** | | I continuously improve my skills in using technology for Mathematics instruction. | | | | |
| **Mean** | | | **2.92** | **Great Extent** | **3.16** | **Great Extent** |

Table 2-D shows that both students and teachers use technology in Mathematics to a Great Extent, though with differences. Students reported the highest use of calculators (M=3.64), indicating strong use of basic tools, while access to Mathematics materials through laptops or desktops was lower (M=2.60). Teachers rated presentation tools and responsible technology use highest (M=4.00), but digital assessment tools such as Kahoot and Quizizz lowest (M=2.20), showing limited platform use. Overall, teachers had a higher mean (M=3.16) than students (M=2.92), suggesting more consistent technology integration. These findings support Borba et al. (2016), who emphasized digital tools for visualization and exploratory learning, and UNESCO (2018), which highlighted teacher ICT competency development for effective technology integration.

## 5. Assessment of Learning

**Table 2-E**
**Mean Distribution of the Respondents**
**Extent of Practice on Assessment of Learning**

| E. Assessment of Learning | | | Students | | Teachers | |
|---|---|---|---|---|---|---|
| | | | Mean | Description | Mean | Description |
| S | 1. | I am assessed using unit tests, standardized tests, and summative examinations that measure my understanding of the lessons. | 3.32 | Very Great Extent | 4.00 | Very Great Extent |
| T | | I design assessments such as unit tests, standardized tests, and summative examinations, aligned with learning objectives and competencies. | | | | |
| S | 2. | I am assessed through written examinations that evaluate my Mathematics skills. | 3.32 | Very Great Extent | 4.00 | Very Great Extent |
| T | | I use varied assessment methods such as unit tests, standardized tests, summative examinations, and performance tasks. | | | | |
| S | 3. | I am given performance tasks or projects to apply Mathematics concepts in real-life situations. | 3.31 | Very Great Extent | 3.93 | Very Great Extent |
| T | | I provide formative assessments to monitor students' progress. | | | | |
| S | 4. | I am assessed through class participation and oral responses in Mathematics lessons. | 3.20 | Great Extent | 3.80 | Very Great Extent |
| T | | I give timely feedback on students' Mathematics performance. | | | | |
| S | 5. | I am assessed through group activities or collaborative tasks in Mathematics. | 3.13 | Great Extent | 4.00 | Very Great Extent |
| T | | I explain assessment such as unit tests, standardized tests and summative examinations results to help students understand their strengths and weaknesses. | | | | |
| S | 6. | I am assessed through practical exercises that test problem-solving skills in Mathematics. | 3.34 | Very Great Extent | 4.00 | Very Great Extent |
| T | | I use assessment data to improve my teaching strategies. | | | | |
| S | 7. | I experience formative assessments that help me improve before major examinations. | 3.25 | Very Great Extent | 3.93 | Very Great Extent |
| T | | I prepare assessment tools that measure both knowledge and skills. | | | | |
| S | 8. | I am given review quizzes or mock tests to prepare for summative assessments. | 3.23 | Great Extent | 4.00 | Very Great Extent |
| T | | I ensure fairness and clarity in grading Mathematics assessments. | | | | |
| S | 9. | I experience varied assessment methods, including written, oral, and performance tasks. | 3.36 | Very Great Extent | 4.00 | Very Great Extent |
| T | | I use assessment results to plan remediation or enrichment activities. | | | | |
| S | 10. | I am assessed using online quizzes, interactive exercises, and digital platforms (e.g., Google Classroom, Kahoot, Quizizz) that evaluate my understanding and skills in specific Mathematics topics. | 2.76 | Great Extent | 3.93 | Very Great Extent |

| | | | | | |
|---|---|---|---|---|---|
| **T** | I reflect on assessment practices to improve students' academic performance. | | | | |
| **Mean** | | **3.22** | **Great Extent** | **3.96** | **Very Great Extent** |

Table 2-E shows that students and teachers demonstrate strong engagement in assessment of learning, though teachers reported higher practice (M=3.96, Very Great Extent) than students (M=3.22, Great Extent). Students rated varied assessments, such as written, oral, and performance tasks, highest (M=3.36), while digital assessments using Google Classroom, Kahoot, and Quizizz were least frequent (M=2.76). Teachers rated objective-aligned assessments, varied methods, result explanation, data use, fair grading, and remediation highest (M=4.00), while timely feedback was lowest (M=3.80), though still very high. These findings support Black and Wiliam (2010), who emphasized assessment and feedback in improving learning, and Kelly et al., (2022), who highlighted alignment among objectives, instruction, and assessment. Overall, assessment practices are effective, but digital assessment tools need strengthening.

**3. Is there a significant difference in the respondents' perceptions on the extent of teachers' practice on the current trends of Teaching-Learning in Junior High School Mathematics when grouped according to profile?**

**a. <u>STUDENTS</u>**

**Table 3-a**
**Results on the Significant Difference in the Student-respondents' Perceptions on the Extent of teacher's Practice on the Current Trends of Teaching-Learning in Junior High School Mathematics When grouped according to Their Profile**

| Profile | Significance F | Decision | Remarks |
|---|---|---|---|
| Sex (M) | .000 | Reject Ho | Significant |
| Grade Level (Grade 8) | .000 | Reject Ho | Significant |
| Combine Family Monthly Income (Below 10,000) | .000 | Reject Ho | Significant |
| Family Arrangement (Living with Both Parents) | .000 | Reject Ho | Significant |
| Availability of Learning Resources at Home (Very Adequate) | .000 | Reject Ho | Significant |
| School Size (Large) | .036 | Reject Ho | Significant |

Table 3-a shows that ANOVA results revealed significant differences in students' perceptions of teachers' extent of practice on current teaching-learning trends in Junior High School Mathematics when grouped according to profile variables. Since all significance F-values were below the 0.05 level, the null hypothesis was rejected. This

means that students' sex, grade level, combined family income, family arrangement, availability of learning resources at home, and school size significantly affect how they perceive teachers' implementation of current Mathematics teaching-learning practices. The results particularly highlight differences among male students, Grade 8 learners, those from families earning below ₱10,000, students living with both parents, those with very adequate home learning resources, and those from large schools. Overall, demographic and socio-economic factors shape students' educational perceptions and experiences.

**b. TEACHERS**

**Table 3-b**
**Results on the Significant Difference in the Respondents' Extent of Practice on the Current Trends of Teaching-Learning in Junior High School Mathematics When grouped according to Their Profile**

| Profile | Significance F | Decision | Remarks |
|---|---|---|---|
| Age (20-25) | .038 | Reject Ho | Significant |
| Monthly Salary | .565 | Accept Ho | Not Significant |
| Number of Years in Teaching | .952 | Accept Ho | Not Significant |
| Workload (Teaching Load per Week) | .087 | Accept Ho | Not Significant |
| Number of Related Trainings Attended (Last 3 Years) | .612 | Accept Ho | Not Significant |

Table 3-b shows that teachers' age significantly affects their perceptions of their extent of practice on current teaching-learning trends in Junior High School Mathematics, as its significance value was below 0.05, leading to the rejection of the null hypothesis. This indicates that age, particularly among teachers aged 20–25, influences how current Mathematics teaching-learning practices are implemented. In contrast, monthly salary, number of years in teaching, workload, and related trainings attended in the last three years had significance values greater than 0.05, resulting in the acceptance of the null hypothesis. Therefore, these variables do not significantly affect teachers' perceptions. The findings are supported by OECD (2019), which reported that younger teachers tend to be more adaptable to new pedagogical approaches, digital tools, innovation, and modern instructional strategies.

**4. How serious are the challenges encountered by the respondents in the Teaching-Learning of Junior High School Mathematics in terms of:**

**1. Curriculum Utilization**

## Table 4-A
## Mean Distribution of the Respondents
## In the Challenge Encountered along Curriculum Utilization

| A. **Curriculum Utilization** | | | **Students** | | **Teachers** | |
|---|---|---|---|---|---|---|
| | | | Mean | Description | Mean | Description |
| **S** | 1. | 1.) I find it difficult to follow lessons because the mathematics curriculum is too broad. | 2.15 | Less Serious | | |
| **T** | | 1.) I find it challenging to cover all the required Mathematics competencies within the given time. | | | 2.93 | Serious |
| **S** | 2. | 2.) I feel that some topics are skipped or not covered properly in class. | 1.78 | Less Serious | | |
| **T** | | 2.) I struggle to adjust lesson pacing due to the broad scope of the mathematics curriculum. | | | 2.67 | Serious |
| **S** | 3. | 3.) I struggle to understand lessons because the pace of teaching is too fast. | 1.81 | Less Serious | | |
| **T** | | 3.) I experience difficulty in ensuring mastery of concepts because of limited instructional time. | | | 2.40 | Less Serious |
| **S** | 4. | 4.) I notice that there is not enough time spent on difficult topics. | 2.01 | Less Serious | 2.53 | Serious |
| **T** | | 4. I feel pressured to move to the next topic even when students have not fully mastered the lesson. | | | | |
| **S** | 5. | 5.) I have difficulty connecting lessons because the curriculum lacks continuity. | 1.86 | Less Serious | 1.87 | Less Serious |
| **T** | | 5. I experience difficulty in sequencing lessons to ensure continuity of learning. | | | | |
| **S** | 6. | 6.) I find it challenging when multiple topics are taught in a single lesson. | 2.28 | Less Serious | 2.73 | Serious |
| **T** | | 6. I struggle to adjust lesson pacing due to the breadth and multiple topics in the curriculum. | | | | |
| **S** | 7. | 7.) I feel overwhelmed because the mathematics curriculum covers multiple topics per grading period, leaving insufficient time for mastery of each concept. | 2.26 | Less Serious | 3.00 | Serious |
| **T** | | 7. I experience difficulty in ensuring mastery of concepts because of the number of topics required per grading period. | | | | |
| **S** | 8. | 8.) I find it difficult to follow and pace mathematics lessons because the curriculum lacks clear learning objectives and structured progression | 2.02 | Less Serious | 2.20 | Less Serious |
| **T** | | 8. I find it challenging to align lessons with the curriculum while addressing students' diverse abilities. | | | | |
| **S** | 9. | 9.) I find that the curriculum does not provide enough examples or exercises for practice. | 1.88 | Less Serious | 2.53 | Serious |
| **T** | | 9. I struggle to provide enough practice activities due to curriculum demands. | | | | |
| **S** | 10. | 10.) I struggle to solve mathematical problems and apply concepts because the curriculum prioritizes rote memorization of formulas and procedures over conceptual understanding. | 2.09 | Less Serious | 2.60 | Serious |
| **T** | | 10. I experience difficulty in integrating real-life applications for all Mathematics topics. | | | | |
| **Mean** | | | **2.01** | **Less Serious** | **2.55** | **Serious** |

Table 4-A shows that students and teachers differ in their perceptions of curriculum utilization challenges. Students rated these challenges as Less Serious overall (M=2.01), with the highest concern on handling multiple topics at once (M=2.29) and the lowest on skipped or incomplete topic coverage (M=1.78). Teachers, however, rated curriculum challenges as Serious overall (M=2.55), especially in ensuring mastery of numerous topics within a grading period (M=3.00), while sequencing lessons was less problematic (M=1.87). These findings suggest the need to improve curriculum pacing, content distribution, and instructional support. This aligns with Schmidt et al. (2011), who emphasized the importance of curriculum organization, and McLeod (2024), who explained that instruction should match learners' cognitive readiness and follow a spiral progression.

## 2. Teaching Strategies

**Table 4-B**
**Mean Distribution of the Respondents**
**In the Challenge Encountered along Teaching Strategies**

| | | A. **Teaching Strategies** | **Students** | | **Teachers** | |
|---|---|---|---|---|---|---|
| | | | Mean | Description | Mean | Description |
| **S** | 1. | 1.) I find it difficult to understand lessons because the teacher relies mostly on lectures. | 1.78 | Less Serious | 1.73 | Not Serious |
| **T** | | 1. I find it difficult to balance lecture, discussion, and activities within a single lesson. | | | | |
| **S** | 2. | 2.) I struggle to participate because group activities are not well-organized. | 1.87 | Less Serious | 2.73 | Serious |
| **T** | | 2. I experience difficulty in encouraging active participation from all students. | | | | |
| **S** | 3. | 3.) I feel confused when the teacher jumps between topics without clear explanations. | 1.90 | Less Serious | 1.80 | Less Serious |
| **T** | | 3. I find it challenging to explain abstract mathematical concepts (e.g., variables, functions, and proofs) in ways that are easily understood by students. | | | | |
| **S** | 4. | 4.) I feel that teachers do not provide enough examples to clarify concepts. | 1.71 | Not Serious | 2.20 | Less Serious |
| **T** | | 2.) I struggle to address individual learning differences during Mathematics instruction. | | | | |
| **S** | 5. | 5.) I struggle to learn when visual aids or teaching materials are not used. | 2.01 | Less Serious | 2.13 | Less Serious |
| **T** | | 5. I find it challenging to use varied teaching strategies such as direct instruction, cooperative learning, flipped classroom, and hands-on activities due to large class sizes. | | | | |
| **S** | 6. | 6.) I find it difficult to ask questions because the teacher does not encourage interaction. | 1.62 | Not Serious | 1.80 | Less Serious |
| **T** | | 8.) I experience difficulty in motivating students who have low confidence in Mathematics. | | | | |
| **S** | 7. | 7.) I feel that problem-solving exercises are not explained step by step. | 1.60 | Not Serious | 1.93 | Less Serious |
| **T** | | 7. I struggle to manage class time when using problem-solving and inquiry-based strategies. | | | | |

| | | | | | | |
|---|---|---|---|---|---|---|
| **S** | 8. | 8.) I find it hard to connect concepts because lessons lack real-life examples. | 1.79 | Less Serious | 2.67 | Serious |
| **T** | | 3.) I find it difficult to maintain students' interest in Mathematics lessons. | | | | |
| **S** | 9. | 9.) I find it difficult to solve problems when demonstrations or modeling are not provided. | 2.00 | Less Serious | 2.13 | Less Serious |
| **T** | | 9. I struggle to provide immediate assistance to students who need extra help. | | | | |
| **S** | 10. | 10.) I struggle to stay engaged when lessons do not include interactive activities such as discussions, games, or hands-on tasks. | 2.02 | Less Serious | 2.27 | Less Serious |
| **T** | | 10. I find it challenging to sustain students' engagement during lengthy problem-solving activities. | | | | |
| **Mean** | | | **1.83** | **Less Serious** | **2.14** | **Less Serious** |

Table 4-B shows that students and teachers perceived challenges in teaching strategies as generally Less Serious, although teachers reported stronger concerns. Students' highest mean was on difficulty staying engaged without interactive activities (M=2.02), while the lowest was on problem-solving not being explained step by step (M=1.60), indicating that these concerns are manageable. Teachers reported the highest challenge in encouraging active participation (M=2.73), interpreted as Serious, while balancing lecture, discussion, and activities was least problematic (M=1.73). Overall, students had a mean of 1.83 and teachers 2.14, both Less Serious. These findings support Hattie (2018), who emphasized teacher clarity and interaction, and Alrajeh and Shindel (2020), who found that instructional support, varied strategies, and participation enhance student engagement and Mathematics achievement.

### 3. Printed Instructional Materials

**Table 4-C**
**Mean Distribution of the Respondents In the Challenge Encountered along Printed Instructional Materials**

| | A. **Printed Instructional Materials** | | **Students** | | **Teachers** | |
|---|---|---|---|---|---|---|
| | | | Mean | Description | Mean | Description |
| **S** | 1. | 1.) I find it difficult to understand lessons because there are not enough instructional materials, such as charts, diagrams, and flashcards, used in class. | 1.70 | Not Serious | 1.93 | Less Serious |
| **T** | | 1. I find it challenging to prepare varied instructional materials such as charts, diagrams, and flashcards due to limited resources. | | | | |
| **S** | 2. | 2.) I find it hard to follow lessons when visual aids such as charts or diagrams are not used. | 1.92 | Less Serious | 2.27 | Less Serious |
| **T** | | 2. I struggle to teach abstract concepts without adequate visual or concrete materials. | | | | |

| | | | | | | |
|---|---|---|---|---|---|---|
| **S** | 3. | 3.) I struggle to understand abstract concepts because there are no concrete or visual materials. | 1.87 | Less Serious | 1.60 | Not Serious |
| **T** | | 4.) I find it difficult to access updated Mathematics textbooks and references. | | | | |
| **S** | 4. | 4.) I feel that worksheets and practice materials are insufficient for mastering lessons. | 1.79 | Less Serious | 1.80 | Less Serious |
| **T** | | 4. I experience difficulty in engaging students in Mathematics lessons due to the lack of interactive instructional materials (e.g., activity sheets, math kits, or learning modules). | | | | |
| **S** | 5. | 5.) I feel confused when symbols, formulas, or diagrams in materials are not clearly presented. | 2.21 | Less Serious | 1.80 | Less Serious |
| **T** | | 5. I experience difficulty in ensuring that instructional materials are appropriate for students' levels. | | | | |
| **S** | 6. | 6.) I struggle to learn when printed materials are not readable or clearly formatted. | 2.26 | Less Serious | 1.87 | Less Serious |
| **T** | | 6. I struggle to design instructional materials that cater to different learning styles. | | | | |
| **S** | 7. | 7.) I find it hard to grasp lessons when manipulatives or hands-on materials are not used. | 1.89 | Less Serious | 2.07 | Less Serious |
| **T** | | 7. I experience difficulty in using manipulatives due to limited availability. | | | | |
| **S** | 8. | 8.) I struggle to apply concepts when instructional materials lack visual representations such as graphs, tables, or diagrams. | 1.95 | Less Serious | 1.87 | Less Serious |
| **T** | | 8. I find it challenging to integrate printed and digital materials effectively. | | | | |
| **S** | 9. | 9.) I struggle to actively participate in mathematics lessons when instructional materials do not include interactive tools such as manipulatives, digital simulations, or hands-on activities. | 1.97 | Less Serious | 1.67 | Not Serious |
| **T** | | 9. I struggle to use instructional materials effectively due to time constraints. | | | | |
| **S** | 10. | 10.) I struggle to learn mathematics effectively when instructional materials do not provide varied formats, such as visual aids, hands-on activities, and written explanations, to accommodate different learning styles. | 2.09 | Less Serious | 1.60 | Not Serious |
| **T** | | 10. I find it challenging to keep instructional materials engaging and relevant. | | | | |
| **Mean** | | | **1.97** | **Less Serious** | **1.85** | **Less Serious** |

Table 4-C shows that both students and teachers experienced manageable challenges with printed instructional materials, generally rated as Less Serious. Students reported the highest concern on unclear or poorly formatted materials (M=2.26), while lack of materials was lowest (M=1.70), indicating Not Serious. Teachers identified difficulty teaching abstract concepts without visual or concrete materials as the highest challenge (M=2.27), while access to updated and engaging materials was lowest (M=1.60). Overall,

students had a mean of 1.97 and teachers 1.85, showing that students experienced slightly more difficulty. These findings support Mayer's (2014) theory that well-designed and structured materials help learners understand complex concepts, and Niño and Lomibao (2026), who emphasized that worksheets, visual aids, and manipulatives enhance comprehension, retention, and performance in Mathematics.

### 4. Digital Learning Material

**Table 4-D**
**Mean Distribution of the Respondents**
**In the Challenge Encountered along Digital Learning Materials**

| | | A. **Digital Learning Materials** | **Students** | | **Teachers** | |
|---|---|---|---|---|---|---|
| | | | Mean | Description | Mean | Description |
| **S** | 1. | 1.) I find it difficult to follow lessons when teachers do not use technological tools such as computers, tablets, or projectors. | 2.03 | Less Serious | 1.73 | Not Serious |
| **T** | | 1. I experience difficulty integrating technology such as computers, tablets, or projectors due to limited access to devices. | | | | |
| **S** | 2. | 2.) I find it hard to stay engaged when lessons do not incorporate videos or animations to explain topics. | 1.91 | Less Serious | 1.80 | Less Serious |
| **T** | | 2. I find it challenging to use digital tools because of insufficient training. | | | | |
| **S** | 3. | 3.) I struggle to participate when online collaborative tools (like Google Docs or Kahoot) are not used. | 1.68 | Not Serious | 1.60 | Not Serious |
| **T** | | 3. I experience difficulty in managing students' use of technology during class. | | | | |
| **S** | 4. | 4.) I find it difficult to review lessons when rqingecorded lectures or digital materials are unavailable. | 1.87 | Less Serious | 2.00 | Less Serious |
| **T** | | 4. I struggle to prepare technology-based instructional materials such as Google Classroom and Kahoot due to time constraints. | | | | |
| **S** | 5. | 5.) I struggle to complete assignments when access to technology is limited at school or at home. | 2.04 | Less Serious | 1.87 | Less Serious |
| **T** | | 5. I struggle to incorporate technology into lessons due to an unstable internet connection. | | | | |
| **S** | 6. | 6.) I find it hard to understand mathematical graphs such as bar graphs, line graphs, linear graphs, and quadratic graphs, when technological tools are not used. | 1.97 | Less Serious | 1.80 | Less Serious |
| **T** | | 6. I struggle to use graphing or visualization software such as Desmos, GeoGebra, and Graphing Calculator effectively. | | | | |
| **S** | 7. | 7.) I struggle to understand mathematics concepts when teachers do not use educational software, such as interactive simulations or learning platforms, to demonstrate and practice lessons. | 1.99 | Less Serious | 1.87 | Less Serious |
| **T** | | 7. I find it difficult to use educational software such as GeoGebra, Desmos, and Maple to explain complex Mathematics concepts. | | | | |

| | | | | | | |
|---|---|---|---|---|---|---|
| **S** | 8. | 8.) I find it difficult to visualize mathematical problems when digital tools for diagrams or graphs are not used. | 1.97 | Less Serious | 2.07 | Less Serious |
| **T** | | 8. I struggle to use graphing or visualization software effectively. | | | | |
| **S** | 9. | 9.) I struggle to understand lessons when teachers do not provide step-by-step demonstrations using digital tools or software such as Photomath and GeoGebra. | 1.99 | Less Serious | 1.93 | Less Serious |
| **T** | | 9. I struggle to balance traditional teaching methods with technology integration. | | | | |
| **S** | 10. | 10.) I feel that my learning is limited when teachers do not incorporate technology to visualize complex concepts like graphs or geometric figures, such as Desmos, GeoGebra, and Graphing Calculator. | 1.89 | Less Serious | 1.73 | Not Serious |
| **T** | | 10. I find it challenging to stay updated with emerging educational technologies. | | | | |
| **Mean** | | | **1.93** | **Less Serious** | **1.84** | **Less Serious** |

Table 4-D shows that students and teachers perceived challenges in digital learning materials as Less Serious, though students experienced slightly more difficulty. Students reported the highest concern in completing assignments due to limited technology access (M=2.04), while the lowest concern was rated Not Serious (M=1.68). Teachers identified difficulty helping students visualize mathematical problems without digital tools as the highest challenge (M=2.07), emphasizing the value of visual supports, while the absence of collaborative tools was least concerning (M=1.60). Overall, students had a mean of 1.93 and teachers 1.84. These findings support Li and Ma (2010), who found that technology improves problem-solving and conceptual understanding, and Baya'a and Daher (2009), who emphasized that digital tools enhance visualization, interaction, and engagement in Mathematics learning.

## 5. Assessment of Learning

**Table 4-E**
**Mean Distribution of the Respondents**
**In the Challenge Encountered along the Assessment of Learning**

| | A. **Assessment of Learning** | | **Students** | | **Teachers** | |
|---|---|---|---|---|---|---|
| | | | Mean | Description | Mean | Description |
| **S** | 1. | 1.) I feel confused when test questions are unclear or ambiguously worded. | 2.52 | Serious | 1.87 | Less Serious |
| **T** | | 1. I find it challenging to design assessments that measure both understanding and skills. | | | | |
| **S** | 2. | 2.) I find it difficult to perform during tests when instructions are not clearly explained. | 2.43 | Less Serious | 1.47 | Not Serious |
| **T** | | 2. I struggle to create assessment tools aligned with learning competencies. | | | | |
| **S** | 3. | 3.) I struggle to retain knowledge when assessments emphasize speed over comprehension. | 2.26 | Less Serious | 1.87 | Less Serious |
| **T** | | 3. I find it challenging to assess students' problem-solving processes, not just final answers. | | | | |

| | | | | | | |
|---|---|---|---|---|---|---|
| **S** | 4. | 4.) I find it hard to focus when assessments are too long or cover too many topics at once. | 2.30 | Less Serious | 1.53 | Not Serious |
| **T** | | 4. I find it challenging to balance assessment demands with instructional time. | | | | |
| **S** | 5. | 5.) I find it difficult to track my progress when assessment results, such as quizzes and tests, are not explained or discussed. | 2.32 | Less Serious | 1.67 | Not Serious |
| **T** | | 5. I experience difficulty in monitoring individual student progress in large classes. | | | | |
| **S** | 6. | 6.) I struggle to learn from mistakes when assessments do not include corrective feedback or remediation. | 2.21 | Less Serious | 1.67 | Not Serious |
| **T** | | 6. I struggle to provide timely and constructive feedback to students. | | | | |
| **S** | 7. | 7.) I feel stressed when the time allocated for tests and quizzes is insufficient to answer all the questions. | 2.39 | Less Serious | 1.67 | Not Serious |
| **T** | | 7. I struggle to manage the time required to check and record assessment results. | | | | |
| **S** | 8. | 8.) I feel unprepared when assessments cover topics that were only briefly discussed in class. | 2.25 | Less Serious | 1.67 | Not Serious |
| **T** | | 8. I struggle to ensure fairness and consistency in grading Mathematics assessments. | | | | |
| **S** | 9. | 9.) I struggle to prioritize and prepare for mathematics assessments when teachers do not clearly explain the points, grading criteria, or relative weight of each test, quiz, or activity | 2.34 | Less Serious | 1.53 | Not Serious |
| **T** | | 9. I struggle to create assessment tools aligned with learning competencies and clearly communicate criteria. | | | | |
| **S** | 10. | 10.) I struggle to organize my study schedule and allocate sufficient time for each topic when multiple mathematics tests, quizzes, or projects are scheduled close together. | 2.36 | Less Serious | 1.80 | Less Serious |
| **T** | | 10. I experience difficulty in conducting formative assessments regularly. | | | | |
| **Mean** | | | **2.34** | **Less Serious** | **1.67** | **Not Serious** |

Table 4-E shows that students experienced more assessment-related challenges than teachers. Students rated unclear or ambiguously worded test questions highest (M=2.52), interpreted as Serious, while limited feedback and remediation was lowest (M=2.21), interpreted as Less Serious. Teachers rated designing assessments that measure understanding and problem-solving highest (M=1.87), while aligning assessments with learning competencies was lowest (M=1.47), indicating Not Serious. Overall, students' mean was 2.34, or Less Serious, while teachers' mean was 1.67, or Not Serious. These findings suggest the need for clearer, well-structured, and student-friendly test items. The results support Popham's (2026) view on diverse assessments with feedback and Black and Wiliam's (2025) emphasis on formative assessment for improving student learning.

**5. Is there a significant difference in the level of seriousness in the challenges encountered by the respondents when grouped according to profile?**

## STUDENTS

**Table 5-a**
**Results on the Significant Difference in the Student-respondents' Perceptions on the Level of Seriousness in the Challenges Encountered when grouped according to Their Profile**

| Profile | Significance F | Decision | Remarks |
|---|---|---|---|
| Sex (M) | .000 | Reject Ho | Significant |
| Grade Level | .072 | Accept Ho | Not Significant |
| Combine Family Monthly Income (Below 10,000) | .000 | Reject Ho | Significant |
| Family Arrangement (Living with Both Parents) | .000 | Reject Ho | Significant |
| Availability of Learning Resources at Home (Very Adequate) | .000 | Reject Ho | Significant |
| School Size (Small) | .001 | Reject Ho | Significant |

Table 5-a shows significant differences in the seriousness of challenges encountered by student-respondents when grouped according to sex, combined family income, family arrangement, availability of learning resources at home, and school size, since their significance values were below 0.05, leading to the rejection of the null hypothesis. However, grade level showed no significant difference, resulting in the acceptance of the null hypothesis. This means grade level does not significantly affect students' perceived challenges in Junior High School Mathematics, while socio-demographic factors do. The findings emphasize differences among males, students from families earning below ₱10,000, those living with both parents, those with very adequate home learning resources, and students in small schools. This supports Else-Quest et al. (2010), who noted that gender may influence mathematics attitudes, confidence, and performance.

## TEACHERS

**Table 5-b**
**Results on the Significant Difference in the Teacher-respondents' Perceptions on the Level of Seriousness in the Challenges Encountered When grouped according to Their Profile**

| Profile | Significance F | Decision | Remarks |
|---|---|---|---|
| Age | .272 | Reject Ho | Significant |
| Monthly Salary (Below 10,000) | .001 | Accept Ho | Not Significant |
| Number of Years in Teaching (Less than 1 Year) | .007 | Accept Ho | Not Significant |

| | | | |
|---|---|---|---|
| Workload (Teaching Load per Week) | .221 | Accept Ho | Not Significant |
| Number of Related Trainings Attended (Last 3 Years) (No Training) | .010 | Accept Ho | Not Significant |

Table 5-b shows that the seriousness of challenges encountered by teacher-respondents differs significantly when grouped according to salary, years of teaching experience, and related trainings attended, as their significance values were below 0.05, leading to the rejection of the null hypothesis. Teachers earning below ₱10,000, with less than one year of service, and without training perceived the challenges as more serious. However, age and workload showed no significant difference, resulting in the acceptance of the null hypothesis. This suggests that professional and institutional factors influence how teachers perceive instructional challenges. The findings support Kini and Podolsky (2016), who emphasized that teaching experience improves classroom management, content knowledge, instructional practices, and teachers' ability to respond effectively to classroom difficulties.

6. **What is the academic performance of the Junior High School in Mathematics?**

**Table 6**
**Frequency Distribution of the Academic Performance of Junior High School in Mathematics**

| INDICATOR | DESCRIPTION | FREQUENCY | PERCENT |
|---|---|---|---|
| 90-100 | Outstanding | 245 | 77.29 |
| 85-89 | Very Satisfactory | 66 | 20.82 |
| 80-84 | Satisfactory | 6 | 1.89 |
| 75-79 | Fairly Satisfactory | 0 | 0 |
| Below 75 | Did Not Meet Expectation | 0 | 0 |
| Total | | 317 | 100 |

Table 6 presents the overall academic performance of Junior High School students in Mathematics across the first, second, and third quarters. The results show that most students achieved high performance, with 245 students or 77.29% classified as Outstanding, 66 students or 20.82% as Very Satisfactory, and only 6 students or 1.89% as Satisfactory. No students were classified as Fairly Satisfactory or Did Not Meet Expectations. These findings indicate that learners consistently demonstrated strong achievement in Mathematics, reflecting effective teaching-learning processes and sustained progress across quarters. This supports Hattie (2018), who emphasized that clear learning goals, structured teaching strategies, continuous assessment, and regular feedback significantly improve students' understanding and academic achievement. Overall, the results suggest very high Mathematics performance and continuous learner improvement.

7. **Is there a significant relationship between and among the extent of practice on the current trends and challenges in the Teaching-Learning of Mathematics and the academic performance of learners?**

**Table 7-A**
**Results on the Significant Relationship between and among the Extent of Practice On the Current Trends and Challenges in the Teaching-Learning of Mathematics and the Academic Performance of Learners**

| Group | Significance r | Decision | Remarks |
|---|---|---|---|
| Extent of Practice On the Current Trends and Academic Performance of Learners | .172 | Reject Ho | Not Significant |
| Challenges in the Teaching-Learning of Mathematics and Academic Performance of Learners | .506 | Reject Ho | Not Significant |
| Extent of Practice On the Current Trends And Challenges in the Teaching-Learning of Mathematics | .000 | Reject Ho | Significant |

Table 7-A shows that Pearson's r-test revealed no significant relationship between the extent of practice of current teaching-learning trends in Mathematics and learners' academic performance, and between teaching-learning challenges and academic performance, since the significance values were greater than 0.05. Thus, the null hypothesis was accepted, indicating that learners' academic performance was not significantly influenced by teaching practices or challenges encountered. However, a significant relationship was found between the extent of practice of current trends and the challenges in teaching-learning Mathematics, as the significance value was below 0.05. This means that teaching practices and challenges influence each other. The findings align with OECD (2019), which noted that students' Mathematics achievement is affected by multiple factors, including background, attitudes, prior knowledge, and classroom context.

## Conclusions

Based on the foregoing summary of findings, it can be concluded that:

The findings of the study reveal that the current trends in the teaching–learning of Junior High School Mathematics are highly practiced by both teachers and students in private schools within the Schools Division of the City of Ilagan. Overall, the different components of the teaching-learning process—curriculum utilization, teaching strategies, instructional materials, use of technology, and assessment of learning—were implemented to a Great Extent to Very Great Extent, indicating that Mathematics instruction is generally effective and aligned with current educational practices.

In terms of curriculum utilization, teachers strictly adhere to competency-based standards and ensure that lessons are aligned with the prescribed learning competencies. This structured implementation helps maintain consistency and supports students' mastery of essential mathematical concepts.

Regarding teaching strategies, the results indicate that teachers employ varied and effective instructional approaches such as clear explanations, guided demonstrations,

collaborative learning activities, and opportunities for class discussions. These strategies help enhance students' understanding and encourage active participation during Mathematics lessons.

The use of printed instructional materials, including worksheets, modules, review notes, and examples, was also found to be highly utilized. These materials serve as important tools in reinforcing lessons, improving students' problem-solving skills, and supporting independent learning.

In terms of technology integration, the findings show that digital tools are used to support instruction; however, their use is generally limited to presentation tools and basic digital resources. While students also utilize online materials such as video tutorials to supplement their learning, the integration of interactive mathematical software and technology-based learning tools remains moderate compared to other instructional components.

Finally, assessment of learning emerged as the strongest area among the teaching-learning practices. Teachers employ a variety of assessment methods, including written tests, performance tasks, formative assessments, and summative examinations, which are aligned with curriculum competencies. These assessment practices help monitor student progress and provide opportunities for feedback and improvement.

Overall, the study concludes that Junior High School Mathematics instruction is effectively implemented, but there are still opportunities to further enhance instructional practices, particularly in strengthening technology integration and expanding learning resources.

**Recommendations**

Based from the findings and conclusions drawn, the following recommendations are presented:

1. Curriculum planners and school administrators may review the scope and sequencing of Mathematics competencies to ensure that lessons are appropriate to students' readiness levels and manageable within available instructional time.

2. School administrators should strengthen support for Mathematics teachers by providing more professional development programs focused on innovative teaching strategies and technology integration.

3. The Department of Education (DepEd) should strengthen collaboration with private schools by including their teachers and administrators in training programs and capacity-building initiatives. This inclusive approach will promote the sharing of best practices, enhance professional competencies, and ensure more consistent and equitable quality of education across both public and private institutions.

4. Schools should provide additional resources such as manipulatives, visual aids, and technology-based learning tools to further improve students' conceptual understanding of Mathematics.

5. Teachers should enhance their instructional practices by increasing the use of interactive digital tools, mathematical software, and online learning platforms to make Mathematics instruction more engaging.

6. Teachers should implement more collaborative and student-centered learning activities to increase students' engagement and participation during Mathematics lessons.

7. Students should continue practicing problem-solving skills, reviewing lessons regularly, and utilizing available learning resources such as printed materials and technology to support their understanding of mathematical concepts.

8. Students are likewise encouraged to actively engage in classroom discussions and learning activities, consult their teachers whenever they encounter difficulties, and cultivate effective study habits and a positive attitude toward Mathematics to sustain and further improve their academic performance.

9. Future researchers may conduct similar studies focusing on other factors influencing Mathematics performance, such as students' attitudes toward Mathematics, parental support, and learning styles.

## Compliance with Ethical Standards

This study complied with ethical standards by securing the necessary permission from the Schools Division Superintendent and the administrators of the participating private schools before the conduct of data gathering. The research instrument was validated to ensure its appropriateness, validity, and reliability for the intended respondents. Participation in the study was voluntary, and the respondents were informed about the purpose of the research, the nature of their participation, and the academic use of the gathered data. Since the study involved Junior High School students and Mathematics teachers, proper coordination with school authorities was observed to protect the welfare of the participants. The confidentiality and privacy of all respondents were strictly maintained, and no names or personal identifiers were disclosed in the presentation, analysis, and interpretation of the data. All responses were treated with utmost confidentiality and used solely for academic and research purposes. The researcher also ensured objectivity, honesty, and integrity in reporting the findings, properly acknowledged all sources, and avoided plagiarism, fabrication, and misrepresentation of data. Overall, the study upheld informed participation, voluntary involvement, confidentiality, respect for respondents, objectivity, and responsible use of data.

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