



Republic of the Philippines  
Department of Education  
REGION VII - CENTRAL VISAYAS

DIVISION OF CITY SCHOOLS - TAGBILARAN CITY

DEPED TAGBILARAN CITY DIVISION  
SDS OFFICE  
UPLOADED

By: [Signature] DATE 11/03/25

**Office of the Schools Division**

**Superintendent**

DIVISION MEMORANDUM

SGOD- 2025- 242

November 03, 2025

**DISSEMINATION OF ONLINE SURVEY ON A VOLUNTARY BASIS**

To: Assistant Schools Division Superintendent  
Chief, CID and SGOD  
All Secondary School Heads  
All Others Concerned

1. This Office, through the Schools Governance and Operation Division, disseminates to all Secondary School Principals to the request of **Marife Corpuz**, a graduate student from DE LA SALLE UNIVERSITY- MANILA, to conduct an online survey among **high school mathematics teachers** as part of her research entitled "*Self-reported Teaching Practices of High School Mathematics Teachers in Implementing the Five Strands of Mathematical Proficiency*".
2. For details, attached is the letter with the survey link.
3. Please be reminded that:
  - a.) Participants in this research activity shall be **strictly voluntary** ;
  - b.) The conduct of the survey shall **not disrupt classes or official functions**; and
  - c.) Respondents' information shall be **treated with utmost confidentiality** in accordance with data privacy regulations and this is solely for academic purposes.
4. Immediate dissemination of this Memorandum is desired.

**WILFREDA D. BONGALOS PhD CESO V**  
Schools Division Superintendent



Address: H. Zamora St., Dampas, Tagbilaran City, Bohol  
Telephone Nos.: (038)427-1702; (038)427-2506; (038)422-8177  
(038)427-6718; (038)544-2147  
Email Address: tagbilarancity.division@deped.gov.ph

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**REQUEST FOR IMMEDIATE ATTENTION: PERMISSION TO CONDUCT SURVEY AMONG HS MATH TEACHERS**

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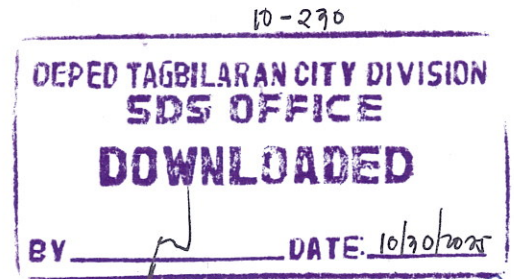
From Marife Corpuz <marife\_corpuz@dlsu.edu.ph>

Date Thu 10/30/2025 8:03 AM

To TAGBILARANCITY DIVISION <tagbilarancity.division@deped.gov.ph>

1 attachment (370 KB)

DEPED TAGBILARAN CITY.pdf;



received SGOD: (signature)  
10/30/25 @ 4:53 pm

You don't often get email from marife\_corpuz@dlsu.edu.ph. [Learn why this is important](#)

Greetings of Peace!

I am MARIFE CORPUZ, a graduate student from DE LA SALLE UNIVERSITY - MANILA, currently conducting a research study titled "Self-Reported Teaching Practices of High School Mathematics Teachers in Implementing the Five Strands of Mathematical Proficiency" as part of my academic requirements.

I am respectfully requesting your permission to conduct an online survey among high school mathematics teachers in your division. Participation is voluntary, and all responses will be kept strictly confidential and used solely for academic purposes.

Attached is my formal request letter, duly endorsed by my research adviser, for your kind review. Should you grant permission, I will coordinate with the designated personnel for the distribution of the online survey link.

I would also like to humbly request a directory of e-mail addresses of the concerned school heads or mathematics coordinators of both public and private schools to facilitate proper and efficient dissemination.

I sincerely appreciate your time and consideration, and I hope for your favorable response to this academic endeavor. Thank you very much.

MARIFE CORPUZ  
MST-Mathematics  
DLSU-Manila

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October 30, 2025

**Dr. WILFREDA D. BONGALOS**  
Schools Division Superintendent  
Division of Tagbilaran City  
Department of Education  
Tagbilaran City, Bohol

**Subject:** Request for Permission to Conduct Online Survey Among High School Mathematics Teachers

Dear Dr. Bongalos,

Peace and All Good!

I am **MARIFE O. CORPUZ**, a graduate student from the **College of Education of De La Salle University - Manila**. I am currently working on a survey research entitled "*Self-Reported Teaching Practices of High School Mathematics Teachers in Implementing the Five Strands of Mathematical Proficiency*" as part of the requirements in a statistics course in my graduate program.

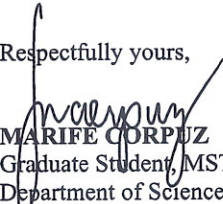
In line with this, I would like to respectfully seek permission from your good office to conduct an **online survey** among the **high school mathematics teachers** under your division. Participation in this study will be completely **voluntary**, and teachers may accomplish the survey at their own convenience. The questionnaire will be administered **through a Google Form**, which will be shared through **e-mail invitations** (survey link: <https://forms.gle/VBZRjLtAe3C5rcdr5>). The survey will be **anonymous**, and no personally identifiable information (such as names, school affiliations, or contact details) will be collected. Only general demographic information will be gathered to analyze group trends. All responses will be handled with **strict confidentiality** and used solely for academic and research purposes.

Attached are the **supporting documents**, including the research outline, informed consent form, and survey questionnaire, for your review and consideration.


I sincerely hope for your kind approval to proceed with this research in collaboration with the high school Mathematics teachers from your division. Your support will be deeply appreciated and will greatly contribute to the successful completion of this research study.

Thank you very much.

Respectfully yours,

  
**MARIFE CORPUZ**  
Graduate Student, MST-Mathematics  
Department of Science Education, College of Education  
De La Salle University - Manila

Noted by:

  
**DR. MARICAR PRUDENTE**  
Research Adviser  
Department of Science Education, College of Education  
De La Salle University - Manila

## ATTACHMENT 1 of 3: RESEARCH OUTLINE

**Title:** Self-Reported Practices of High School Mathematics Teachers in Implementing the Five Strands of Mathematical Proficiency

**Researcher:** Marife Corpuz

**Institution:** De La Salle University - Manila

**College:** Br. Andrew Gonzales FSC College of Education (BAGCED)

### **Problem Statement:**

The MATATAG Mathematics Curriculum emphasizes the goal for Filipino learners to be mathematically proficient. Mathematical proficiency consists of the five interwoven and interdependent strands: conceptual understanding, procedural fluency, strategic competence, adaptive reasoning, and productive disposition (NRC, 2001). However, classroom observations and teacher accounts suggest that mathematics instruction often concentrates only on two or three strands. This gap between curricular intent and classroom reality remains underexplored with the limited empirical evidence in the Philippine context, particularly in terms of how high school mathematics teachers report their practices and the conditions that either support or limit the implementation of all five strands.

### **Purpose Statement:**

The purpose of this study is to examine high school mathematics teachers' self-reported practices in implementing the five strands of mathematical proficiency. It also seeks to identify the key facilitators and barriers affecting implementation and to determine whether practices differ across demographic groups.

### **Research Questions:**

- 1) To what extent do high school mathematics teachers implement each of the five strands of mathematical proficiency?
- 2) What factors do teachers perceive as the key facilitators or barriers in implementing the five strands?
- 3) Do teachers' self-reported practices significantly differ across demographic variables?

### **Participants**

The study will involve high school Mathematics teachers from both public and private schools across the Philippines. Participation will be *voluntary*, and only teachers who consent to take part will answer the online survey. It will be *anonymous* and no identifying information such as name, school, or contact details will be collected.

### **Research Method**

This study will use a quantitative research design through an online survey administered via Google Form. The survey consists of three parts: (1) Demographic Information (such as type and location of school, educational attainment, years of teaching, and professional development received), (2) Instructional Practices (frequency of implementing the five strands of mathematical proficiency), and (3) Facilitators and Barriers (factors that support or limit implementation)

Each item uses a 4-point Likert scale. The instrument underwent expert validation and pilot testing to ensure clarity, relevance, and reliability.

### **Data Collection Procedure**

The survey link will be shared through social media posts and e-mail invitations. Teachers who voluntarily agree will accomplish the online form at their convenience. The estimated completion time is about 10 minutes. No incentives will be provided and participation is purely voluntary.

### **Data Analysis**

Collected data will be analyzed using descriptive and inferential statistics: Descriptive statistics (mean and standard deviation) will describe implementation and impact levels while inferential statistics (t-test, ANOVA or nonparametric tests) will determine differences across demographic groups.

### **Ethical Considerations**

The study ensures that participation is voluntary and based on informed consent. The survey is anonymous and no personally identifiable information will be gathered. All responses will be treated with strict confidentiality and used solely for academic and research purposes.

**Data Collection Period:** October 29 – November 9, 2025

**ATTACHMENT 2 of 3: INFORMED CONSENT FORM**  
(reflected on the first page of the online survey)

**SECTION 1: CONSENT FORM**

*Dear Math Teacher,*

*You are invited to participate in this research study, which aims to determine the extent to which high school mathematics teachers implement the five strands of mathematical proficiency (**conceptual understanding, procedural fluency, strategic competence, adaptive reasoning, and productive disposition**) in their teaching practices and to identify the factors that affect this implementation.*

*Your participation involves answering an online survey composed of three parts:  
a) Demographic Information, b) Teaching Practices, and c) Factors Affecting Implementation.*

*The survey will take about 10 minutes to complete.*

*Participation is **voluntary and anonymous**. NO personal identifiable information (such as name, e-mail address, and school affiliation) will be collected. All responses will be treated with **strict confidentiality** and will only be used for research purposes. You may withdraw your participation at any time without penalty, and it will not affect you in any way.*

*We kindly request that you answer all questions with **honesty and sincerity**, as your genuine responses are crucial for ensuring the reliability and validity of the results. Your insights as a teacher are highly valued and will greatly contribute to the success of this research.*

*If you have concerns, you may contact:  
Marife Corpuz (Researcher) – [marife\\_corpuz@dlsu.edu.ph](mailto:marife_corpuz@dlsu.edu.ph)*

*By clicking "**YES, I consent to participate**", you confirm that you have read the information above, understood its contents, and voluntarily agree to take part in this study. Your consent to participate in this research project is also assumed upon completion of this questionnaire.*

**ATTACHMENT 3 of 3: SURVEY QUESTIONNAIRE**  
(reflected on the pages 2-5 of the online survey)

**SECTION 2: DEMOGRAPHIC INFORMATION**

*This section gathers essential background details about the respondents. For each item, please select the option that best describes you.*

- 1) Type of school  
Options: Public  
Private
- 2) Location of school  
Options: NCR  
Luzon  
Visayas  
Mindanao
- 3) Highest Educational Attainment  
Options: Bachelor's Degree  
With MA/MS units  
Master's Degree  
With Doctorate units  
Doctorate Degree
- 4) Years of Teaching (include this school year)  
Options: less than 3  
3-10  
11-20  
21-30  
more than 30
- 5) Professional Development in Mathematics (Received from 2023 to 2025)  
Options: none  
1-5  
6-10  
more than 10

**SECTION 3: TEACHERS' INSTRUCTIONAL PRACTICES**

*This section contains statements related to the five strands of mathematical proficiency. For each item, please indicate **how often** you practice it in your classroom by selecting the response that best reflects your teaching practices. Respond based on your **actual practices this school year 2025-2026**.*

**LIKERT SCALE:**

- |               |   |
|---------------|---|
| 4 = ALWAYS    | (I intentionally carry out this practice in nearly all lessons) |
| 3 = OFTEN     | (I often apply this practice in most lessons)                   |
| 2 = SOMETIMES | (I use this practice occasionally, depending on the topic)      |
| 1 = RARELY    | (I seldom or never use this practice)                           |

**CONCEPTUAL UNDERSTANDING**

*(comprehension of mathematical concepts, operations, and relations)*

1. I connect new lessons to concepts that students have previously learned in mathematics.
2. I help students understand "why" mathematical concepts and procedures are important by exploring how they apply in particular contexts.
3. I help students understand how mathematical concepts are connected to the procedures they use.
4. I use multiple ways (e.g., words, symbols, graphs, diagrams, or manipulatives) to represent mathematical situations.
5. I ask students to explain mathematical procedures in their own words, orally or in writing.
6. I address students' misconceptions by clarifying the concepts underlying their errors.

**PROCEDURAL FLUENCY**

*(skill in carrying out procedures flexibly, accurately, efficiently, and appropriately)*

1. I conduct practice exercises to help students develop fluency in basic computations.
2. I teach algorithms and show how they can be applied flexibly to solve different types of problems.
3. I demonstrate different procedures and explain when each one is most efficient or appropriate to use.
4. I ask students to choose and explain which tool (mental math, calculator, or pen and paper) is most appropriate for solving a given problem.

5. I encourage students to use estimation, mental math, or reverse operations to check whether their answers make sense.
6. I help students understand “why” procedures work so they can avoid practicing incorrect methods.

### **STRATEGIC COMPETENCE**

*(ability to formulate, represent, and solve mathematical problems)*

1. I assign tasks that require students to formulate math problems from given situations.
2. I ask students to identify key information (knowns, unknowns, constraints) in a problem.
3. I ask students to represent problems by making drawings, writing equations, or constructing tables, charts, graphs, or other models to help them understand and solve the problems.
4. I ask students to use different problem-solving strategies and explain which one is most efficient.
5. I provide students with routine problems that require them to recall and apply previously learned solution methods accurately.
6. I challenge students with nonroutine problems that can be solved using multiple valid solution approaches.

### **ADAPTIVE REASONING**

*(capacity for logical thought, reflection, explanation, and justification)*

1. I ask students to justify a mathematical claim by providing reasons or proofs.
2. I provide students opportunities to reflect on and discuss the reasoning behind their strategy.
3. I engage students in discussions about how mathematical concepts and procedures fit together logically.
4. I ask “what-if” or counterexample questions that extend students’ reasoning.
5. I lead students to discover patterns and draw general conclusions (inductive reasoning)
6. I demonstrate how to use logical steps to reach conclusions from given assumptions (deductive reasoning).

### **PRODUCTIVE DISPOSITION**

*(habitual inclination to see mathematics as sensible, useful, and worthwhile, coupled with a belief in diligence and one’s own efficacy)*

1. I connect math lessons to real-life situations, future studies, and careers to highlight their relevance.
2. I create a classroom culture that helps reduce students’ math anxiety.
3. I acknowledge students’ effort, persistence, and strategies, not just their correct answers.
4. I design learning activities that promote peer support and collaborative problem solving.
5. I give tasks that let students experience productive struggle.
6. I provide opportunities for students to reflect on how their effort and persistence helped them understand mathematical concepts and procedures.

### **Section 4: FACTORS AFFECTING IMPLEMENTATION (Part I)**

*This section lists factors that may facilitate your implementation of the five strands of mathematical proficiency. For each item, please indicate the extent to which it facilitates your implementation by selecting the response that best reflects your experience. Respond based on your actual experiences this school year 2025-2026.*

Please review your ratings in Section 3 and identify the strand of mathematical proficiency that you **implement the most** (ie, the strand that obtained the highest total score)

1. Conceptual Understanding
2. Procedural Fluency
3. Strategic Competence
4. Adaptive Reasoning
5. Productive Disposition

Considering your answer in the previous item, which of these factors facilitated your implementation the most?

**FACTORS:**

- a) Assessment practices (methods used to measure the skills emphasized by the strand)
- b) Class size
- c) Instructional resources (e.g. references, printed materials, technology, manipulatives)
- d) Instructional time
- e) Lesson preparation time
- f) Mastery of subject matter
- g) Professional development and trainings
- h) Support from peers
- i) Support from the school administration
- j) Teacher’s beliefs about students’ ability to learn mathematics

Choose only three (3), then rank them as 1 = strongest facilitator, 2 = next strongest facilitator, and 3 = third strongest facilitator. **IMPORTANT:** Please base your ranking on your actual experiences, and not on what you think should or would facilitate implementation.

- 1 = Strongest Facilitator (Write ONE LETTER only)
- 2 = Next Strongest Facilitator (Write ONE LETTER only)
- 3 = Third Strongest Facilitator (Write ONE LETTER only)

**Section 5: FACTORS AFFECTING IMPLEMENTATION (Part II)**

*This section lists factors that may hinder your implementation of the five strands of mathematical proficiency. For each item, please indicate the extent to which it hinders your implementation by selecting the response that best reflects your experience. Respond based on your **actual experiences this school year 2025-2026.***

Please review your ratings in Section 3 and identify the strand of mathematical proficiency that you **implement the least** (ie, the strand that obtained the lowest total score)

1. Conceptual Understanding
2. Procedural Fluency
3. Strategic Competence
4. Adaptive Reasoning
5. Productive Disposition

Considering your answer in the previous item, which of these factors hindered your implementation the least?

**FACTORS:**

- a) Assessment practices (methods used to measure the skills emphasized by the strand)
- b) Class size
- c) Instructional resources (e.g. references, printed materials, technology, manipulatives)
- d) Instructional time
- e) Lesson preparation time
- f) Mastery of subject matter
- g) Professional development and trainings
- h) Support from peers
- i) Support from the school administration
- j) Teacher's beliefs about students' ability to learn mathematics

Choose only three (3), then rank them as 1 = strongest barrier, 2 = next strongest barrier, and 3 = third strongest barrier. **IMPORTANT:** Please base your ranking on your actual experiences, and not on what you think should or would limit implementation.

- 1 = Strongest Barrier (Write ONE LETTER only)
- 2 = Next Strongest Barrier (Write ONE LETTER only)
- 3 = Third Strongest Barrier (Write ONE LETTER only)

**Section 6: CLOSING**

*Thank you for completing the main parts of the survey. Before submitting, you may use the space below to share any additional insights, comments, or suggestions regarding the implementation of the five strands of mathematical proficiency in your teaching practice.*

*(OPTIONAL) Do you have any additional comments or suggestions you would like to share?*