



(RESEARCH ARTICLE)



QUESTIONING PRACTICES OF MATHEMATICS TEACHERS IN LOW- AND HIGH-PERFORMING MSU COMMUNITY HIGH SCHOOLS

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World Journal of Advanced Research and Reviews, 2026, 32(01), 589–599

Publication history: Received on 25 August 2026; revised on 08 October 2026; accepted on 10 October 2026

Article DOI: <https://doi.org/10.30574/wjarr.2026.32.1.2525>

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ABSTRACT

This study examined the levels and frequency of questions used by mathematics teachers in low- and high-performing MSU Community High Schools and described how these questioning practices were perceived by both teachers and students. The study employed a descriptive-correlational research design using quantitative and qualitative approaches. The participants consisted of mathematics teachers and selected students from nine MSU Community High Schools. Data were gathered through questionnaires, classroom observation checklists, reflection questionnaires, student journals, field notes, and documentation of classroom activities. Quantitative data were analyzed using descriptive statistics, Chi-Square Test, and Pearson Product-Moment Correlation, while qualitative observations were used to supplement and verify the quantitative findings. Results showed that teachers in both low- and high-performing schools commonly used questions that encouraged students to synthesize or summarize the lesson. Among teacher respondents, synthesis ranked first in both school categories. In low-performing schools, application ranked second, comprehension third, and knowledge and evaluation fourth, while analysis ranked sixth. In high-performing schools, evaluation ranked second, application and analysis ranked third, comprehension ranked fifth, and knowledge ranked sixth. Student responses also showed generally similar patterns, with summary or synthesis questions ranking first in both school categories. Overall, the findings indicate that mathematics teachers in both low- and high-performing schools employed varied levels of questioning, including questions directed toward comprehension, application, analysis, evaluation, and synthesis. The similarities in questioning patterns suggest that questioning practices alone may not fully explain differences in mathematics performance between the two school categories.

Keywords: Higher-Order Thinking, Mathematics Education, MSU Community High Schools Questioning Techniques, Teacher Questioning

1 INTRODUCTION

Mathematics is the construction of knowledge that deals with quantitative and qualitative relationship of space and time. It is a human activity that deals with patterns, problem-solving, logical thinking and more in an attempt to understand the world and make sense of that understanding. Imparting knowledge on mathematics rests heavily on the shoulder of educator. Teaching mathematics is a task, which demands the best efforts of teacher. It requires more than a thorough knowledge of the subject matter, a broad perspective of the field of mathematics itself, an understanding of

the place and importance of mathematics to meet the need of the learner. It demands skill in the techniques and methods of teaching styles each particular topic or aspect of the subject.

Mathematics is considered the mother of all learning in both arts and sciences. It permeates life, and is essential in almost every field: measurement in fashion, angles in sports, technology and economics. This perspective on Mathematics has gained more attention with the phenomenal advances in information and communication technology. Mathematics is not just computation but a tool for understanding structures, relationships and patterns to produce solutions for complex real life problems, thus a necessity for people of all ages to be successful in life. Given the inestimable usefulness of mathematics in daily life, factors that adversely affect the students' ability to understand, learn, and apply mathematics concepts and principles.

Clearly, mathematics education in the Philippines needs to level up in the interest of national development and progress in a globalizing world. More serious attention must be given to the growing body of empirical data which outline a nosedive or progressive downward trend of learning outcome that, in turn, serve proof of the deterioration of the quality of math education.

Undeniably, learning in mathematics and mathematics education has been problematic for the last three decades as borne out by assessment results. The average fourth year students mastered just about half of the content of basic subjects like Science and Mathematics (David, 2002). As David (2002) sees it, the poor mean percentage score in the NAT reflects the teaching methods and practices employed by the teachers. In other words, the problem of depressed performance is linked with the way teachers teach the subject (Henay, 2010). There is a vitally important link between teacher preparation and the performance of teachers and their students' achievement. Every child must be taught by a quality teacher.

Teacher competence and performance, of all salient factors other than learner variables, have the most direct influence on the learning process and in all likelihood, on the learning outcome or student achievement (Nye & Hedges, 2004). This vital point is expressed in the form of an equation by Stronge (2010): **Effective Teachers = Student Achievement**. This is based on the findings of numerous research. Effective teaching involves the right thing at the right time, teaching the right amount and in the right way and teaching in an acceptable quality (Orille, 1979).

The search for the Holy Grail of effective teaching may well begin with teaching styles which consist of the personal attributes of a teacher, and vary from one teacher to another. Teachers in these times of change and growing complexity must be skilled in reflective practice and understand its crucial role in advancing student achievement. Salem (2001) defined teaching styles as "the procedures or processes adopted and employed by the teacher in order to achieve the day-to-day objective of the lesson". They are also the conglomerations of one's views, convictions, and approaches designed for the attainment of maximum results in the teaching-learning process. Consequently, the way teachers deliver instruction in the classroom is influential to the learning of the students. Teachers' variation of their styles would depend on the personality type, pattern of behavior, mode of performances, and their attitude towards the subject and students. Thus, teaching styles should match the learning styles of the students so they can be motivated to study and learn more especially in academic subjects like mathematics (Macarambon, 2011).

The teaching-learning process is basically a communication between the teacher as transmitter and facilitator of learning and the students, hence, the teacher's discursive style is of great importance. Discursive teaching style refers to interactive lecturing where the instructor or teacher permits and actively encourages participation throughout the lecture by asking questions, soliciting participation from the students, tackling any difficulties or misunderstandings on the spot, generally, encouraging a classroom culture in which students may feel more comfortable asking their questions, making interventions, and initiating discussion (Tutino, 2013). How the teacher uses language to advantage as a tool of communication to aid the process of concept formation (Vygotsky, 1994) through dynamic or active teacher-student interaction consisting of students' questions for clarification, teacher's explanations, citing examples or illustrations, and encouraging further participation, is crucial for future learning. A concept emerges and takes shape in the course of such interaction. Complex concepts in particular, which abound in mathematics, are elucidated and conveyed through language. Learning such concepts involves some type of external experience being transformed into internal processes through classroom discourse (teacher-student interaction).

In view of the acknowledged centrality of classroom discussion/discourse in the learning process, teachers' discursive styles in mathematics pedagogy have received considerable attention from exponents and advocates of various suasions. Forman and Ansell (2001) describe the teacher's role as one of helping students structure their talk, revoicing, organizing, turn-taking, asking students to reflect on and evaluate explanations provided, and orchestrating collective arguments. Likewise, O'Connor (2001) developed an approach which he describes as position-driven discussion involving a teacher who rivets students' attention on one main question that has a limited number of possible usually unknown answers; the aim of this kind of discussion is for each student to take his/her own position and defend such position with evidence. As can be imagined, this approach generates a multiplicity of contending positions and much

lively exchange. Sierpinska (2007) makes an impassioned proposal for a curriculum that is relevant from the historical and cultural perspective to initiate students into the historically developed ways of doing and talking in the course of getting them involved in mathematics. This involves use of the meta-discursive rules of the mathematical genre for them to become second nature to the students. Students learn as they are taught. Moreover, Sierpinska argues that discursive approach focuses on participation in an activity of sharing commonalities and constructively dealing with the meanings people see to have in common.

Another concern meriting explicit attention since this is related to teacher's discursive approach is the use of questioning as an instructional strategy. One of the major duties of a mathematics classroom teacher is to promote thought and inspire inquiry in students, and one effective way of doing this is through proper questioning in the classroom. Caram and Davis (2005) emphasized that teachers' questions when used correctly can enhance student learning by developing critical thinking skills, reinforce student understanding, correct student misunderstanding, provide feedback for students, and enliven classroom discussions. Teacher's questions are of significant value for many instructional purposes, eliciting student reflection, and challenging deeper student understanding and engagement in the classroom.

One major aspect of successful teaching and learning processes in the mathematics classroom is the interaction between the teacher and the learners. In order to have a good interaction in the classroom, teachers pose questions, which should play a major role in the type of learning in mathematics classroom, because of the abstract nature of mathematics to which the problem of poor performance is often attributed. There could be many reasons that could cause students to have learning difficulties in mathematics, but the pivotal role of the classroom teacher in making sure that the students develop adequate self-confidence and a good disposition to mathematics seems indisputable. It could very well be the underlying factor of poor performance in mathematics, which can be attained by teachers' effective use of classroom questions. Teachers' classroom questions should be an effective and important part of the lesson (Muijs & Reynolds, 2005). A good question is a powerful teaching tool and a good teacher should know how to use questions for maximum impact (McHill & Dunkin, 2002). It is important to be able to use classroom questions well in order to teach effectively (Brualdi, 1998).

Leongson (2003) describes Filipino students as excelling in knowledge acquisition but faring considerably poorly in lessons requiring higher order thinking skills. This weakness is evident in the performance of students in national and international surveys on mathematics and science competencies, for example, the National Achievement Test (NAT) here in the Philippines and the Third International Mathematics and Science Study (TIMSS) U.S.A. They have consistently obtained scores below the international average in Science and Mathematics. As the TIMSS report revealed, the Philippines ignominiously landed near the bottom of the list of participating nations, underscoring the need for a search for solution to improve science and mathematics education for countries that lag behind others (Schmidt et al., 2001; Ibe, 1997; cited in Guro, 2009). Added to these depressing exhibits of student performance is the performance of pre-service teachers and mathematics teachers in the Professional Board Examination, which reveals the same picture of poor competencies (Philippine Daily Inquirer, 1986; Ibe, 1995).

This study was conceptualized based on the cited reports on the poor performance of students in mathematics which attest to the deteriorating quality of math education, and studies on the crucial role of teacher quality – i.e. qualifications and competence as manifest in the teaching style, methods, strategies or techniques used in teaching mathematics. Just by the dismal results of these studies, there is the necessity and urgency of undertaking an inquiry on the teaching styles, discursive style, and questioning techniques of MSU Community High School mathematics teachers to find out how these affect learning outcome or student achievement. A rot in mathematics education has set in, particularly in schools in ARMM, which have set the depressing record of being the lowest performing schools (Esplanada, Philippine Daily Inquirer, September 17, 2007) and the cause of this decay must be brought to light.

2 RESEARCH METHODOLOGY

2.1 Research Design

This study is descriptive-correlational in approach utilizing quantitative and qualitative forms of data. Quantitative part of the study involved the use of rating scale type (Likert) survey questionnaire and respondents' profile questionnaire. Quantitative data was in the form of scores in rating scale, grades, and proportions in the respondents' profile questionnaire. The qualitative part of the study involved the used of checklist observation, field notes, audio-video recordings, interviews, and teachers' generated/constructed artifacts such as lesson plans and test questionnaire. Qualitative data was in the form of descriptive text/words and documentation of teachers' generated artifacts.

Correlation was employed to determine the kind or magnitude of relationship that is assumed to exist between the correlated variables.

The independent variables are the socio-demographic profile of the teacher respondents such as age, gender, highest educational attainment, number of years teaching mathematics, and number of seminars/training in mathematics attended. The dependent variables are the teaching styles/strategies, discursive styles, and questioning techniques of the teachers, and students' performance in mathematics.

2.2 Research Instruments

The following instruments were used in this study:

2.2.1 Questioning Techniques Questionnaire

It is a 100-item questionnaire which was adopted to draw information about teachers teaching styles, their discursive styles and their questioning techniques on mathematics teaching. Of this 100-item, Fifty (50) items were intended for the mathematics teachers to answer and fifty (50) items for the students to get the exact information of the respondents. The instrument used for collecting the data was closed questionnaire with Likert-scale standard answers with 100 items. Twelve (12) items for teaching styles, ten (10) items for discursive styles, five (5) items for questioning techniques, seven (7) items for frequency of asking questions, eleven (11) items for types of question asked, and six (6) items for level of questions asked. This instrument was made by the TIMSS – R 1999 originally intended for mathematics teachers. The methodology administered in coming up with this instrument was thru an investigation which is of qualitative nature with correlational designed.

2.2.2 Traces of Influence on the Teachers

In this study, traces is refers to classroom observation checklist for the teachers' respondents, interview guide using reflection questionnaire to the students made by the researcher and diary/journal writing of the students as they observed to their mathematics teachers teaching styles, and lastly, the narrative of the observed teacher respondents' actual teaching activities in the classroom and field notes as guided by the researcher.

- **Classroom Observation Checklist.** The classroom observation checklist was designed to collect data on how the teachers handle mathematics classes based on their teaching styles/practices employed. The checklist consists of four categories to observe. a.) Formal mathematics teaching styles such as delegator/group style, expert/blended type, formal authority/lecture style, manager, personal model, and a facilitator/activity style. b.) Body language and voice such as speaker-audience distance and good movement and stance. c.) Facial expression by conservative look, dull/boring, energetic, joyful, lazy, limited words idea, smart, smiling, and strict, and d.) Other styles shown by the mathematics teachers like; interactive classroom, fun, personalized for young learner, guidance, encourager, transmitter (teacher), constructivist teaching method, provider, translator, emphasize the relationship between lesson, informer of the daily lessons, organizer, disciplinarian, approachable, demonstrator, and roaming around the class. All of these enumerated words/sentences were carefully checked by the researcher with the two co-teacher assistant and the results was duly analysed by the researcher.
- The purpose of the classroom observations checklist was to elicit an actual data of the teachers' teaching style, discursive style, questioning technique and the type of question they asked during mathematics lessons to cross-check all the data gathered (see Appendix B).
- **Interview Guide.** The researcher used semi-standardized reflection questionnaire. The questions were based on the content of the questionnaire to supplement and verify the data collected from the respondents. Reflection questionnaire of the students were then properly document using worksheet/notebook to ensure the reliability of the information gathered and at the same time the diary/journal of the students were also included.
- **Field Notes.** Field notes used in this study contained the researcher's detailed notes in the entire data-gathering activity. Notes were made on the experience with the teachers, students, and classroom co-observers assistant on the description of the teaching styles, discursive styles and questioning techniques of the mathematics teachers' respondents and the last documentation were the narrative of the observed teacher's respondents'. The field notes were then properly documented using audio- video recorder and notebook.

2.3 Data Gathering Procedures

Prior to the site visitation of the nine (9) schools, the researcher first secured a permission from the Assistant Vice Chancellor for Academic Affairs to conduct the study and a letter of introduction to the school administrator/principal of each community high school with whom the researcher was working in close coordination. For data gathering in the field, the researcher was equipped and guided with a prepared schedule/timetable and a simple frame consisting of the list of subject mathematics teachers in each school who should participating in the study.

After the sought permission was granted, the researcher, guided by her prepared timetable and sample frame, went to the community high schools where the selected subject respondent/participants are teaching. Administering the questionnaire was done by congressional district, which is the more systematic and cost-efficient way to go about it. Preparatory to the distribution of the questionnaires is the design to obtain the needed ordinal and cardinal types of data on the subject participants' profile and quantitative data on their teaching style, discursive style, and questioning techniques.

The teachers and their students chosen in each school both high and low performing MSU Community High Schools were the respondents of this study and the questionnaire were properly administered to them. All 42 mathematics teachers were observed using a checklist during class discussion and only six (6) students from each class were purposely chosen based on their learning styles. The students were divided into two (2) groups in each class. Three (3) students answered the reflection- questionnaires and three (3) students were asked to write a journal/diary regarding the teaching styles of their teacher. These are the school participated; MSU Balindong, MSU Baloi, MSU Binidyan, MSU Lopez Jaena, MSU Malabang, MSU Marantao, MSU Saguian, MSU Tugaya, and MSU Wao. Teachers and students selected in each school to form part of the sample was oriented or briefed regarding their role in the study or what is expected of them. The orientation/briefing is also an opportunity for the researcher to establish rapport with them as subject participants. They were presented with the approved request for permission which guarantees the inform consent, confidentiality and anonymity. These guarantees and the purpose of the study were carefully explained to them in the orientation/briefing to gain their trust and full cooperation.

Afterwards, the researcher administered the questionnaires herself and was present all throughout this stage of data gathering to entertain questions that might be raised. A researcher aide or co-teacher and video men gave their assistance. Retrieval of the questionnaire were done on the same day. When the quantitative and qualitative data were on hands, these were tabulated, analysed and interpreted.

2.4 Statistical Treatment of Data

To ensure the reliability of the outcome of the research data in this study, the researcher separately organized and analyzed the documentation data based on what was measured quantitatively and qualitatively. Analysis of the qualitative data (teachers' teaching styles, discursive styles and questioning techniques) were done through careful examination and interpretation of the data gathered from the video recording, note taking by the researcher and the students' questionnaires. To analyze the quantitative data, Statistical Packages for social Science (SPSS) software for MS Windows was utilized.

The Chi-Square Test (χ^2) was used to determine significant relationships between mathematics teachers' profile and their teaching styles, discursive style, and questioning technique and the type of questions raised during the classroom discussions and in the examination, as well as the mathematics performance of the student among the high and low performing MSU Community high schools.

Pearson Product-Moment Coefficient of Correlation was utilized to determine the significant relationship that may have existed between the three sets of variables. Namely: teachers teaching styles, discursive styles, and questioning techniques of the respondents.

3 RESULT AND DISCUSSION

3.1 Levels of Questions and Its Frequency of Used in the Class and in Examination by Mathematics Teacher- Respondents in the Low and High Performing MSU Community High Schools

Table 13 shows the sum, mean, and rank of the respondents. Mathematics Teacher-Respondents level of question in Low and High Performing MSU Community High Schools were measured.

Table 13 shows the mathematics teacher-respondents' level of questions and the frequency of such questions' use in class and in the exam among the **low performing MSU Community High Schools**. As can be seen, there are 30 teachers who ask questions that make the students come up with a synthesis of the lesson with a rank of 1. There are 28 teachers who ask questions that probe if the student is able to apply what he or she learned about the lesson with a rank of 2. There are 27 teachers who ask questions that probe if the student understands/comprehends the lesson with a rank of 3. There are 25 teachers who ask questions that try to find out if the student knows anything about the lesson and ask questions that make the students evaluate their understanding of the lesson with a rank of 4.5. Lastly, there are 24 teachers who ask questions that make the students analyze points of the lesson or to analyze a problem with a rank of 6.

Table 13: Mathematics Teacher-Respondents' Levels of Questions Asked in Low and High Performing MSU Community High Schools

Level of Questions Indicators	School Category (*)					
	LPS			HPS		
	Sum of Score	Mean Score (n=19)	Rank	Sum of (score)	Mean Score (n=23)	rank
I ask questions that make the students come up with a synthesis of the lesson.	30	1.58	1	34	1.48	1
I ask questions that probe if the student is able to apply what he or she has learned about the lesson.	28	1.47	2	32	1.39	3.5
I ask questions that probe if the student understands/comprehends the lesson.	27	1.42	3	28	1.22	5
I ask questions that try to find out if the student knows anything about the lesson.	25	1.32	4.5	25	1.09	6
I ask questions that make the students evaluate their understanding of the lesson.	25	1.32	4.5	33	1.43	2
I ask questions that make the students analyze points of the lesson or to analyze a problem.	24	1.26	6	32	1.39	3.5

Teachers' classroom questions should be an effective and an important part of the lesson. According to Moijis and Reynolds (20005), there are several factors which can be considered important for effective questioning, one of them being a good question. When teachers' classroom questions and the questioning techniques are not used effectively, there

may be negative results in the teaching-learning process. Mason (2000) stated that the style and nature of questions encountered by the students strongly influences the sense that they make of the subject matter. Teachers can facilitate the development of critical thinking, decision making and problem solving in students in mathematics classroom for effective learning outcomes.

Table 13 shows the mathematics teacher respondents' level of questions and the frequency of such questions' use in class and in the exam in the high performing MSU Community High Schools. As can be seen from the table that there are 34 teachers who ask questions that make the students come up with a synthesis of the lesson with a rank of 1. Thirty three (33) teachers ask questions that make the students evaluate their understanding of the lesson with a rank of 2. Furthermore, there are 32 teachers who ask questions that probe if the student is able to apply what he or she learned about the lesson and ask questions that make the students analyze points of the lesson or to analyze a problem with a rank of 3.5. There are 28 teachers who ask questions that probe if the student understands/comprehends the lesson with a rank of 5. Lastly, there are 25 teachers who ask questions that try to find out if the student knows anything about the lesson with a rank of 6.

Comparing the findings in terms of level of questions from both the LP and HP schools, it reveals that Mathematics teachers from these target schools apply the same level of questioning type. There was no remarkable difference between the two looking at the ranks of the indicators. Both group of teachers illustrate the type of questioning techniques that caters to the development of the higher order critical thinking skills of the learners. These type of questions are incline to facilitate interactions during class discussions.

Walker (1975) and Wringe (1989) stated that intensive communication takes place in lessons by asking and answering question. In the questioning-answering exchange, varieties of questions are very important. Marzano, Pollock, and Pickering (2005) state that questions help students connect what they are learning to what they already know. According to Paley and Weiss (2004), questioning helps qualify, probe and challenge current ideas, and expose misconceptions. Crockett (2004) pointed out that well-planned questioning strategies encourage active participation in learning along with enhanced-problem-solving and concept development.

Moreover, Danielson's (1996) view is that "good and skilled classroom questions, when they are carefully crafted and framed engage" can guide students in the true exploration of the content and allows the students to exhibit their understanding of the concept.

Table 14: Mathematics Teacher-Respondents' Levels of Questions Asked to the Students in Low and High Performing MSU Community High Schools

Level of Questions Indicators	School Category (*)					
	LPS			HPS		
	Sum of Score	Mean Score (n=430)	Rank	Sum of (score)	Mean Score (n=708)	Rank
My teacher asks Questions that make the students come up with a summary of the lesson.	769	1.79	1	1168	1.65	1
My teacher asks Questions that probe if the student can apply what he or she has learned about the lesson.	721	1.68	2	1088	1.54	3
My teacher asks Questions that probe if the student understands/comprehends the lesson.	723	1.68	3	1102	1.56	2
My teacher asks Questions that make the students analyze points of the lesson or to analyze a problem.	719	1.67	4	1065	1.50	5
My teacher asks Questions that make the students think about their understanding of the lesson.	675	1.57	5	1079	1.52	4
My teacher asks Questions that try to find out if the student knows anything about the lesson.	660	1.53	6	1054	1.49	6

Table 14 shows the Mathematics Teacher-Respondents' Levels of Questions Asked to the Student in Low and High Performing MSU Community High Schools given the various level of questions indicators. As shown from the table for **low performing MSU Community High Schools**, questions that make the students come up with a summary of the lesson has a sum of score of 769, with a mean score of 1.79 and has a rank of 1. Questions that probe if the student can apply what he or she has learned about the lesson has a sum of score of 721 with a mean score of 1.68 and has a rank of 2. Questions that probe if the student understands/comprehends the lesson has a sum of score of 723, with a mean score of 1.68 and has a rank of 3. Questions that make the students analyze points of the lesson or to analyze a problem has a sum of score of 719, with a mean score of 1.67 and has a rank of 4. Questions that make the students think about their understanding of the lesson has a sum of score of 675, with a mean score of 1.57 and has a rank of 5. Lastly, questions that try to find out if the student knows anything about the lesson has a sum of score of 660, with a mean score of 1.53 and has a rank of 6.

On the other hand, for **high performing MSU Community High Schools**, questions that make the students come up with a summary of the lesson has a sum of score of 1168, with a mean score of 1.65 and has a rank of 1. Questions that probe if the student can apply what he or she has learned about the lesson has a sum of score of 1088 with a mean score of 1.54 and has a rank of 3. Questions that probe if the student understands/comprehends the lesson has a sum of score of 1102, with a mean score of 1.56 and has a rank of 2. Questions that make the students analyze points of the lesson or to analyze a problem has a sum of score of 1065, with a mean score of 1.50 and has a rank of 5. Questions that make the students think about their understanding of the lesson has a sum of score of 1079, with a mean score of 1.52 and has a rank of 4. Lastly, questions that try to find out if the student knows anything about the lesson has a sum of score of 1054, with a mean score of 1.49 and has a rank of 6.

4 CONCLUSION

The study concludes that mathematics teachers in both low- and high-performing MSU Community High Schools utilized different levels of classroom questioning, with questions requiring students to synthesize or summarize lessons consistently ranking first among both teacher and student respondents. This indicates that teachers in both school categories used questioning not only to determine students' knowledge and comprehension but also to encourage application, analysis, evaluation, and synthesis of mathematical concepts.

The findings further show that the overall pattern of questioning was generally similar between low- and high-performing schools. Among teachers, synthesis ranked first in both groups, while knowledge-oriented questions generally ranked lowest. Student responses likewise placed summary or synthesis questions first and knowledge questions last in both school categories. Although there were differences in the rankings of application, comprehension, analysis, and evaluation questions, these differences did not indicate a substantially different overall pattern of questioning between the two groups.

The results therefore suggest that mathematics teachers in both school categories were using questioning techniques that could promote classroom interaction, understanding, problem-solving, and higher-order thinking. However, the similarity in questioning practices also indicates that differences in student mathematics performance cannot be attributed to questioning techniques alone based on the findings of this study.

Overall, effective questioning remains an important component of mathematics instruction because it provides opportunities for students to explain, apply, analyze, evaluate, and synthesize mathematical ideas. The findings highlight the importance of examining questioning practices together with other teaching, learning, and school-related factors when understanding differences in mathematics achievement.

STATEMENTS ON COMPLIANCE WITH ETHICAL STANDARDS

Disclosure of conflict of interest

The authors declare no conflicts of interest regarding this manuscript.

Statement of informed consent

The questionnaire is designed to provide information on teachers on the said title. A classroom observation and specific interview will also included to reinforce the questionnaire will be done to teachers. The names and other personal details is confidential .

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