

Parental Involvement and Mathematics Academic Performance of Grade 2 Learners

Lucille T. Hife^a, Nick C. Pañares^b

^a hifelucille123@gmail.com, ^bnick.pañares@deped.gov.ph
Southern de Oro Philippines College – Graduate School, Cagayan de Oro City, Philippines

Abstract

Parenting involves providing a supportive home environment that fosters learning. This paper examines the parental involvement and the Mathematics academic performance of Grade 2 learners of Balingasag Central District. Specifically, it is geared to determine the extent of parental involvement, the Mathematics academic performance of Grade 2 Learners for the Second Quarter of the School Year 2022-2023, and the relationship between parental involvement and Mathematics academic performance. The instrument used was an adapted questionnaire by Grover (2015). It employed the descriptive-correlation research design using Stratified Random Sampling among one hundred fifty (150) parents respondents. The statistical tools were the mean, standard deviation, frequency, percentage, and Pearson Correlation Coefficient. The study found that the level of parental involvement in parenting, communicating, learning at home, decision-making, volunteering, and collaborating with the community was High. They have a Satisfactory level of learners' Mathematics Academic Performance. All six types of Epstein parental involvement were significant in the Mathematics Academic Performance of Grade 2 learners. Thus, parents may continue to be involved in their children's education and overall development by helping them with homework, attending school events, communicating with teachers, volunteering at school, participating in parent-teacher associations, and supporting their children's extracurricular activities.

Keywords: Parental Involvement, Mathematics Academic Performance

1. Introduction

Parental involvement in education influences performance in school. In particular, parental involvement in mathematics education has been associated with improved numeracy skills and performance among young learners. Mathematical skills are necessary for comprehending and interpreting numerical information, making data-based decisions, and solving day-to-day problems; therefore, they are essential for academic and post-school success.

Recent research has demonstrated that the involvement of parents in learning mathematics can take many forms, such as assistance with assignments, guidance, and progress tracking. In particular, Capraro et al. (2020) observed that parent involvement in mathematics assignments was positively associated with early elementary school pupils' mathematics achievement. Additionally, a study by Ramani and Siegler (2018) found that parents who engaged in numerical activities with their children, such as counting objects and playing number games, had children with better Mathematical skills. The development of Mathematics skills provides learners with the tools they need to do their research and acquire thinking abilities. Learners need to build their numeracy skills because it gives them a foundation on which to study and apply such skills in real-world scenarios.

Department of Education released a DepEd Order No. 12, s. 2015 on Guidelines on the Early Language, Literacy, and Numeracy Program: Professional Development Component. In this program, Filipino children will acquire literacy and numeracy abilities and attitudes supporting lifelong learning. More precisely, it intends to create a sustainable and affordable professional development system for teachers while

enhancing the reading and Math skills of K-3 learners using the K-12 Basic Education Curriculum.

Even though there are advantages to parents participating in their children's math education, not all parents do. The level of parental involvement in their children's math education might vary depending on their financial situation, family's educational history, and traditional educational beliefs. Investigating innovative strategies for encouraging parental involvement in the current environment is important. Understanding the factors that either help or hinder parents' involvement in math education is necessary. This thesis aims to identify factors influencing parental involvement in mathematics learning and propose interventions promoting parental involvement in all areas. It also aims to investigate the relationship between parental involvement and the mathematics academic performance of Grade 2 learners in the Balingasag Central District for the School Year 2022–2023 and identify factors contributing to parental involvement in mathematics learning.

Parental involvement in their child's education is believed to positively impact the child's development in achieving their educational goals in schools, both academic and non-academic, and that includes numeracy, which is very important as a lifelong skill. It gives learners access to critical Mathematical ideas, knowledge, and skills and connects their learning with their personal and everyday activities.

This study anchored to Epstein's six (6) types of parental involvement model and their impact on the mathematics academic performance of Grade 2 learners. Epstein's model proposed that parental involvement can take on six (6) types: parenting, communicating, volunteering, learning at home, decision-making, and collaborating with the community.

Parenting involves providing a supportive home environment that fosters learning, such as setting routines and rules that promote learning and positive behavior (Epstein, 2018). The communication type of involvement involves maintaining ongoing communication between parents and teachers to ensure that students receive consistent messages about the importance of education (Raguindin et al., 2021). Volunteering involves parents participating in school activities, such as helping with fundraising events or chaperoning field trips (Epstein, 2018).

The learning-at-home type of involvement focuses on activities that promote learning at home, such as homework help, reading with children, and engaging in educational activities (Ihmeideh et al., 2020). The decision-making type of involvement involves parents having input in school decision-making processes, such as participating in school councils or serving on parent-teacher associations (Raguindin et al., 2021). Collaborating with community involvement involves parents working with community organizations to improve educational opportunities for children (Jaiswal, 2018).

According to Tan et al. (2020), these six types of parental involvement are evident in how parents connect with their children, interfere in schools to negotiate for more excellent provisions to meet their children's learner needs and manage their children's lives to maximize the great learning.

Recent research has shown that parental involvement in Mathematics education can positively impact children's numeracy performance. For example, a study by Zhu et al. (2023) found that parental involvement in Mathematics homework was positively associated with children's Mathematical achievement in grade 2. Another study by Cheung et al. (2019) found that parental involvement in Mathematics education was associated with increased Mathematical self-efficacy among students.

2. Methodology

This research employed a descriptive-correlational design. A correlational design systematically investigates the nature of the relationships or associations between and among variables. Specifically, a descriptive-correlational design describes the variables and their naturally occurring relationships (Noah, 2021). It is used to collect quantifiable data that can be analyzed to draw statistical conclusions about the target respondents. This research design described parental involvement in parenting, communicating, volunteering, studying at home, making decisions, community collaboration, and learning at home and the

academic performance of Grade 2 learners. This also helps understand the study's significant relationship between parental Involvement and the Mathematics Academic Performance of Grade 2 learners in the Balingasag Central District. The researcher used descriptive statistics such as mean, standard deviation, frequency, and percentage to describe the study's variables. In addition, Pearson Product Moment Correlation Coefficient (r) was used to determine the significance of the study's dependent and independent variables.

3. Results and Discussions

1. 1. What level of involvement by parents is there in each of the following areas?

- 1.1 Parenting;
- 1.2 Communicating;
- 1.3 Decision-Making;
- 1.4 Collaborating with the Community;
- 1.5 Learning-at-Home; and
- 1.6 Volunteering?

Table 1

Parental involvement in terms of Parenting

INDICATORS	Mean	SD	Description	Interpretation
1. I maintain clear rules at home that my child should obey	4.58	0.65	Always	Very High
2. I pick my child up from school in the afternoon.	4.19	1.07	Often	High
3. I teach my child how to perform home-living skills (ex. laundry, dishes, car maintenance).	3.99	1.03	Often	High
4. I arrange times at home when my child's classmates can come and play.	3.93	0.86	Often	High
5. I assigned daily household chores for each child.	4.15	0.85	Often	High
6. I provide a quiet place for my child to rest, think, and work alone.	4.22	0.90	Always	Very High
7. I control the amount of time my child spends watching TV and the types of programs.	4.43	0.74	Always	Very High
8. I ask my child how his/her day was at school.	4.51	0.76	Always	Very High
9. I speak English at home, which will enable my child to communicate easily outside the home.	3.07	1.09	Sometimes	Moderate Low
10. I keep a regular morning and bedtime schedule for my child.	4.02	0.97	Often	High
Overall	4.11	0.46	Often	High

Note: 4.21-5.00 Very High 3.41-4.20 High 2.61-3.40 Moderate Low 1.81-2.60 Low 1.00-2.60 Very Low

Table 1 presents the distribution of respondents' parental involvement in parenting. It has an Overall Mean of 4.11 with SD = 0.46, which is described as Often and interpreted as High. It means that most parents support the pupils' learning and guide them toward the right attitude. They also provide basic needs like food, shelter, clothes, and school materials will help the child feel secure and develop self-confidence. This implies that parents' support, guidance, and protection help learners develop their full potential as they become confident in all their work. Learners who see their parents are there for them are likelier to take chances and learn something new instead of sticking in their comfort zones. This in line with the blog of Positive Action (2021), that the impact of a parent on their child is significant. Educators, peers, and the media cannot compare to the direct impact they have on children. Tamboto et al. (2021) stated that with good parenting, parents can create a welcoming environment at home for children to study. This approach includes ideas for improving the home environment so that learning may occur there, parent education initiatives, and family support programs. For learners, outcomes include increasing attendance, understanding the value of education, and growing their regard for parents.

Moreover, the indicator, *I maintain clear rules at home that my child should obey*, has the highest Mean of 4.58 with SD=0.65, which is described as *Always* and interpreted as *Very High*. This means that parents set rules to be followed by their child at home. They were highly involved in disciplining their

children and setting rules at home. This implies that parents involved in this kind of practice will help children develop respect and obedience, which will positively influence their academic performance, especially in understanding mathematics, by simply following the rules in answering it. According to Myers-Young (2018), a child's education incorporates school, and 85 percent of their education occurs outside school. To follow classroom regulations, learners must develop the ability to follow their own rules. Active parents can maintain their children's lives inside and outside the school structure. Children need a routine at both home and school. When a parent encourages structure and rules, the child will develop intellectually.

On the other hand, the indicator, *I speak English at home will enable my child to communicate easily outside the home*, has the lowest Mean of 3.07 with SD=1.09, which is described as *Sometimes* and interpreted as *Moderately Low*. It means that parents seldom speak the English language in their home. They communicate with their children using the local language. This implies that parents have difficulty using English, and for some other reason, parents might not use it. They are more comfortable talking to their children in their mother tongue language. According to Clark (2020), parents' illiteracy may hinder their ability to assist their children in reaching developmental milestones. Parents may claim a language barrier, in which case they cannot comprehend the necessity of involvement since they are not proficient in English. Parents who are struggling financially are less likely to provide a stable educational environment for their children (Vance 2018). However, they must still understand how important it is for them to be involved in their child's growth, and those working parents must find time to help children in their everyday tasks and learning.

Table 2
Parental involvement in terms of Communicating

INDICATORS	Mean	SD	Description	Interpretation
1. I talk with my child's teacher via telephone or email.	3.16	0.94	Sometimes	Moderate Low
2. I communicate with school staff if I am concerned about things that my child tells me about school.	3.78	1.03	Often	High
3. I talk to the teacher about my child's accomplishments.	3.99	1.00	Often	High
4. I talk to school staff when my child has difficulties at school.	3.78	1.03	Often	High
5. I find out about the child's lesson progress.	4.29	0.95	Always	Very High
6. I attend a parent reading workshop.	3.35	1.34	Sometimes	Moderate Low
7. I attend adult education to prepare myself to help children with English assignments.	3.34	1.33	Sometimes	Moderate Low
8. I contact my child's school to get information.	3.96	1.05	Often	High
9. I talk to school staff about school and classroom rules.	3.90	0.93	Often	High
10. I talk with other parents about school meetings and events.	3.93	1.02	Often	High
11. I talk with people at my teenager's school about training or career development opportunities for myself.	3.45	1.11	Often	High
12. I talk with school staff about our personal and family matters if it affects my child's work at school.	3.40	1.18	Sometimes	Moderate Low
13. I talk to the teacher about how my child gets along with his/her classmates.	4.03	0.94	Often	High
14. I praise my child for his/her schoolwork in front of the teacher.	3.55	1.25	Often	High
Overall	3.71	0.71	Often	High
Note: 4.21-5.00 Very High 3.41-4.20 High 2.61-3.40 Moderate Low 1.81-2.60 Low 1.00-2.60 Very Low				

Table 2 presents the distribution of respondents' parental involvement in communicating. It has an Overall Mean of 3.71 with SD = 0.71, which is described as *Often* and interpreted as *High*. This means that good communication between parents and teachers can positively increase partnerships to facilitate learning. Trust and understanding are fostered through good communication. This implies that creating efficient communication between teachers and parents can help parents better understand school policies and programs and help them track their child's academic performance. According to Reese (2021), communication

facilitates the development of positive relationships and trust between schools and parents, thereby assisting learners in achieving success and engaging their families. Reese (2021) also added that researchers had found a strong link between regular interactions with other people, trust, and both possible and actual future outcomes. Although there are various ways to gauge trust, it frequently depends on how well a parent-teacher relationship functions as a whole. Delgado (2019) also added that teachers feel more valued when parents understand their difficulties and try to communicate with them. It aids educators in better understanding their learners and tailoring their lessons accordingly. Clark (2020) noted that communicating with teachers regarding school and home activities that affect children's education is one method parents may use to help their children learn.

Moreover, the indicator *I found about the child's lesson progress* has the highest Mean of 4.29 with $SD=0.95$, which is described as Always and interpreted as Very High. It means that the involvement of parents in their children's education is therefore rising. Parents can keep a careful eye on their children's academic development by closely monitoring their performance in school. By communicating with teachers about their growth and performance, parents can stay aware of their children's strengths, weaknesses, and areas that need improvement by taking an active role in their education. This implies that parents can learn more about their children's lessons, development, and concerns when communicating with teachers successfully. Having this knowledge enables parents to give their children the specific support they need to achieve academically, such as tutoring or more resources. Clark (2020) emphasizes that parents are encouraged to talk about the academic achievements of their child, conduct, and other educational concerns with their teachers during parent-teacher meetings or via other means of communication created by the teachers. Smith et al. (2020) also stated that when parents independently contacted the teacher to communicate learners' school performance and situation, it will help the learner perform better in class.

On the other hand, the indicator, *I talk with my child's teacher on the telephone or through email*, has the lowest Mean of 3.16 with $SD=0.94$, which is described as Sometimes and interpreted as Moderately Low. This means that parents must remember to communicate with teachers because they focus more on working for their daily needs. This implies that reaching teachers through telephone or email is less priority to them. Some factors might affect parents to be less involved in this activity. These factors are stated in the study of Stamatis and Chatzinikola (2021). They found that many parents need to recognize the value of Communication between instructors and parents. Many parents may have problems with the availability and accessibility of technology and the Internet. They may need help with using it since they are not ICT literate. Moreover, they may prefer a school visit to connect with the teachers or other school personnel.

Table 3 presents the distribution of respondents' parental involvement in Volunteering. It has an Overall Mean of 3.77 with $SD = 0.60$, which is described as Often and interpreted as High. It means that parental volunteerism is an integral element of contemporary education. This could strengthen connections between parents and schools and help parents network with other parents who could offer assistance and support. This implies that parental involvement benefits teachers and the school community and demonstrates to children and other learners that school is important and worth the time and effort. Ihmeideh et al. (2020) state that the volunteering type of parental involvement entails enlisting parents to assist learners and teachers in school programs. This includes organizing and motivating parents to assist and support schools and learners, which can help parents comprehend what teachers do, which might raise their empathy for the teacher's work (Harris, 2019).

Moreover, the indicator, *I always attend homeroom PTA to keep myself updated on school activities*, has the highest Mean of 4.50 with $SD=0.71$, which is described as Always and interpreted as Very High. It means that parents could be excellent partners in creating a safe and conducive learning environment. This implies that attending school meetings would greatly help them assist their children in school and other activities provided by teachers. Also, it helps the parents be aware of the status of their child in terms of academic progress. According to It (2020), parental involvement in a child's education will likely increase their long-term success. Attending the homeroom PTA can positively affect the child as they see their parents

support them by joining school activities. Parent-Teacher Associations (PTAs) provide parents with numerous options to get involved through volunteer work and other means. Parents may assist their child's academic growth and stay informed about potential problems by attending PTA meetings and are welcome to ask questions regarding learners' progress. With the help of this knowledge, parents can provide their children with the academic support they require and create a positive learning environment.

Table 3*Parental involvement in terms of Volunteering*

INDICATORS	Mean	SD	Description	Interpretation
1. I volunteer at my child's school.	3.83	0.94	Often	High
2. I participate in fundraising activities at my child's school.	3.76	1.05	Often	High
3. I suggest activities or school trips to the teacher.	3.10	1.26	Sometimes	Moderate Low
4. I talk with people at my child's school about training or career development opportunities for myself.	3.13	1.08	Sometimes	Moderate Low
5. I attend workshops to help me understand my child's learning style.	3.04	1.21	Sometimes	Moderate Low
6. I let my child participate in community and school programs that offer rewards.	3.77	0.92	Often	High
7. I always attend homeroom PTA to keep myself updated on school activities.	4.50	0.71	Always	Very high
8. I let the child attend all school extra-curricular activities.	4.19	0.78	Often	High
9. I donate some amount when I think it is for the betterment of my child's welfare.	3.82	0.99	Often	High
10. I am willing to help the school through brigada eskwela.	4.38	0.75	Always	Very high
11. I report to the principal whatever school incident that might harm the safety of the pupils.	3.91	1.01	Often	High
Overall	3.77	0.60	Often	High

Note: 4.21-5.00 Very High 3.41-4.20 High 2.61-3.40 Moderate Low 1.81-2.60 Low 1.00-2.60 Very Low

On the other hand, the indicator *I attended a workshop to help me understand my child's learning style* has the lowest Mean of 3.16 with $SD=0.94$, which is described as Sometimes and interpreted as Moderately Low. It means that parent involvement in attending workshops becomes less priority to them. This implies that many parents should have attended workshops for reasons that prevent them from attending. For example, parents might be busy working to provide for their family's needs, and some might need more interest in such activities. Moreover, schools may have provided limited schedules for the workshop, and they cannot join. In the blog of Positive Action (2021), some parents may need more experience in helping their children's achievement. They will require aid in figuring out where to start and how to help in a way that is advantageous to the child. To encourage all parents to participate, schools may provide training and seminars. The importance of parental involvement, creating a conducive learning environment at home, tracking a child's academic progress, encouraging good study habits at home, and helping a child set goals for school should all be covered in some training and workshops the school offers to parents.

Table 4 on the next page presents the distribution of respondents' parental involvement in learning at home. It has an Overall Mean of 4.19 with $SD = 0.52$, which is described as Often and interpreted as High. It means parents' involvement in supporting learners at home is essential, and they give time for it. This implies that despite parents' busy schedules, they give time to guiding and helping their children with school homework activities and provide learning at home. Cauilan and Salazar (2022) stated that there are various ways that parents can help enhance the educational opportunities and school services available to their children. Following their areas of expertise, they can volunteer for projects like helping to provide learning and school facilities and equipment, tutoring or co-teaching, and providing career awareness information.

Table 4
Parental involvement in terms of Learning at Home

INDICATORS	Mean	SD	Description	Interpretation
1. I bring home learning materials for my child (tapes, videos, books).	4.13	0.91	Often	High
2. I provide assistance or check in with my child when they are completing homework.	4.33	0.79	Always	Very High
3. I help my child with academic skills they are struggling with.	4.49	0.71	Always	Very High
4. I make sure my child completes their homework.	4.50	0.79	Always	Very High
5. I read aloud to my child every day	3.78	0.94	Often	High
6. I help the child at home with assignments or other schoolwork	4.40	0.90	Always	Very High
7. I reinforce what the teacher has taught	4.11	0.76	Often	High
8. I spend time with my child working on math skills	4.19	0.94	Often	High
9. I do creative activities with my child (like singing, drawing, and storytelling)	4.06	0.98	Often	High
10. I ensure that my child has a quiet place at home where they can complete schoolwork.	4.24	0.83	Always	Very High
11. I check to see that my child has a place at home where books and school materials are kept.	4.25	0.86	Always	Very High
12. I draw for the child so he/she can understand some concepts in science.	3.89	1.02	Often	High
13. I use daily objects to illustrate math operations.	4.09	0.93	Often	High
14. I look for videos, books, or stories that can help my child understand the lesson well	4.27	0.83	Always	Very High
Overall	4.19	0.52	Often	High

Note: 4.21-5.00 Very High 3.41-4.20 High 2.61-3.40 Moderate Low 1.81-2.60 Low 1.00-2.60 Very Low

The help they give affects their child's growth, learning, and performance in school. It includes helping their child with education-related tasks at home and providing direct support before and during lessons at school. Parents may be informed of the abilities needed for learners to succeed, such as guidance on monitoring and discussing schoolwork at home (Harris, 2019). With parents' assistance, it increases learners' academic achievement.

Moreover, the indicator, *I make sure my child completes their homework*, has the highest Mean of 4.50 with SD=0.79, which is described as Always and interpreted as Very High. It means that parents are actively assisting their children with their assignments. They ensure their child is working with the task and extend their help to whatever problem or concerns they need to make them understand. This implies that parents can assist their children with assignments by providing direction, encouragement, and support. Assuring that their children have done their assignments was seen as very important. It can influence a child's academic performance and desire to do their task as a learner to achieve success. Ga and Bilige's (2019) research also shows a beneficial relationship between a parent's involvement in helping their child's work-home activities and the learner's academic success. The impact of each component on the children's accomplishment was, however, influenced by the level of parental involvement in their education. As part of homework supervision, it's important to ensure learners do their assignments on time, set screen time limits, and create a supportive learning atmosphere.

On the other hand, the indicator *I read aloud to my child daily* has the lowest Mean of 3.78 with SD=0.94, which is described as Often and interpreted as High. It means that the development of their children's reading skills is something that parents are also involved in and concerned about. Reading aloud to their children at home helps them improve and strengthen their reading skills. This implies that parental involvement in their education outside of the typical school setting is essential for children to develop to their greatest potential. Reading and telling stories helps promotes brain development and imagination, fosters language and emotion development, and strengthens interpersonal bonds. According to Erdem and Kaya (2020), parental participation and the amount of time students spend reading at home significantly impact

reading, literacy development, and academic accomplishment. The results of this study show that parental involvement in their children's schooling encourages the growth of their literacy.

Table 5
Parental involvement in terms of Decision Making

INDICATORS	Mean	SD	Description	Interpretation
1. I talk with school staff about disciplinary procedures.	3.61	1.13	Often	High
2. I attend organized family school associations at my child's school (ex. PTA meetings).	4.24	0.86	Always	Very High
3. I talk with school staff about our personal and family matters if it affects my child's work at school	3.49	1.22	Often	High
4. I talk to school staff about school and classroom rules.	3.88	1.06	Often	High
5. Attend parent-teacher association (PTA) meetings and parent-teacher conferences regularly	4.40	0.82	Always	Very high
6. I attend conferences with teachers to talk about my pupils' learning or behavior	4.00	1.09	Often	High
7. I feel that teachers and the principal encourage parents to be involved at school.	4.14	0.96	Often	High
8. I feel that parents in my child's school support one another.	4.23	0.80	Always	Very High
9. I participate in parent and family social activities at my child's school.	4.27	0.88	Always	Very High
10. I talk with my child's teacher or principal about disciplinary problems	3.99	1.01	Often	High
11. I report suspicious activity/activities of some parents to the teachers.	3.47	1.21	Often	High
12. I consult the school about the right dress code for parents when entering the school premise	3.63	1.28	Often	High
13. I obey school rules and regulations.	4.54	0.80	Always	Very High
14. I respect the school's authority over my child's welfare.	4.62	0.67	Always	Very High
Overall	4.04	0.60	Often	High
Note: 4.21-5.00 Very High 3.41-4.20 High 2.61-3.40 Moderate Low 1.81-2.60 Low 1.00-2.60 Very Low				

Table 5 illustrates the distribution of respondents' parental involvement in decision-making. It has an Overall Mean of 4.04 with SD = 0.60, which is described as Often and interpreted as High. It means that parents have a significant role in a child's academic and school decision-making; such parental decisions impact the mathematical achievement of a child. Parents can foster their child's mathematical success by establishing high expectations, selecting quality educational resources, engaging in mathematics-related activities, collaborating with teachers, and fostering determination and resiliency. This implies that parents can impact their children's education by participating in school decision-making processes and that parents who put in the time and effort to make informed decisions about their children's mathematical education can greatly impact their future academic and professional endeavors. Shared decision-making between parents and school promotes good relationships and partnerships in promoting learners' academic performance. Ihmeideh et al. (2020) emphasize the value of including parents in decision-making, especially in dangerous situations. Clark (2020) added that parent participation in decision-making could allow parents to contribute to positive transformation and problem-solving at the school. It has been discovered that parents who actively share their opinions and recommendations have a more significant impact on the school, which may improve the child's influence in academic settings.

Moreover, the indicator, *I respect the school's authority over my child's welfare*, has the highest Mean of 4.62 with SD=0.6, which is described as Always and interpreted as Very High. It means that parents respect school guidelines and teachers' rules for what might have been done to the child's development. This implies that parents know and value that the school oversees their child's welfare. Even though parents want

to be active in every part of their children's lives, they sometimes have to trust and rely on educators who are trained professionals. Additionally, schools are responsible for ensuring all learners' safety and well-being while on campus, including ensuring everyone follows the rules, protocols, and safety measures. Safety and success in school are all parents want for their children. Therefore, trusting in the school's authority is one way to support children's education and growth. Fisher et al. (2022) state that recognizing the value of the school and agreeing with its vision and mission, viewing the institution as a place to attain education and knowledge and as an equal opportunity, creates a pleasant, challenging, and disciplinary-free environment. These factors influence parental involvement in schools: a secure setting for learners. Parents who strongly identify with these characteristics are more inclined to support the school's guiding principles and expectations and become engaged. In contrast, parents with limited school identification are more likely to oppose the school-instilled values and norms in their children.

On the other hand, the indicator, *I report suspicious activity/activities of some parents to the teachers*, have the lowest Mean of 3.47 with SD=1.21, which is described as Often and interpreted as High. This means parents are very concerned about their children's education and safety. This implies that being concerned with everyone, especially learners, and participating in solving problems related to school and learners is very important to the safety and development of a child. Clark (2020) states that participation in decision-making could allow parents to contribute to positive transformation and problem-solving at the school. It has been discovered that parents who actively share their opinions and recommendations have a greater impact on the school, which may improve the child's influence in academic settings.

Table 6
Parental involvement in terms of Collaborating with Community

INDICATORS	Mean	SD	Description	Interpretation
1. I suggest activities or school trips to teachers.	2.71	1.49	Sometimes	Moderate Low
2. I participate in community and family social activities at my child's school (ex. sports games, plays, carnivals).	4.19	0.88	Often	High
3. I talk with my child's teachers on the telephone or through email.	3.50	1.05	Sometimes	Moderate Low
4. I talk with other parents about school meetings and events.	3.74	1.07	Often	High
5. I work in the school as an aide, parent tutor, parent volunteer, assistant teacher, assistant librarian or other such jobs	2.88	1.30	Sometimes	Moderate Low
6. I talk to school staff when my child has difficulties at school.	3.75	0.91	Often	High
7. I meet with other families from my child's classroom outside of school.	3.49	1.26	Often	High
8. I talk about how my child is doing in school to family and friends.	3.56	1.22	Often	High
9. I take my child places in the community to learn specific things (museum, church).	3.82	1.06	Often	High
10. I apply some life skills that I learned from the PTA to my home and to the community	3.79	1.16	Often	High
Overall	3.54	0.75	Often	High

Note: 4.21-5.00 Very High 3.41-4.20 High 2.61-3.40 Moderate Low 1.81-2.60 Low 1.00-2.60 Very Low

Table 6 on the next page showcases the distribution of respondents' parental involvement in collaborating with the community. It has an Overall Mean of 3.54 with SD = 0.75, which is described as Often and interpreted as High. It means that parents are aware of the advantages of community involvement for their children. Parents who are dedicated to enhancing their child's mathematics performance must collaborate with the community. By building support, promoting an interest of mathematics, improving learning opportunities, and bridging the gap between home and school, parents can actively participate in their child's mathematical development. In partnership with community members, parents may supply their children with the necessary support, resources, and opportunities for mathematics and beyond. This implies that children learn most effectively when their parents, teachers, and community members collaborate to

support and encourage them. Schools cannot meet all of a child's developmental requirements independently. Parental involvement and community support are essential. Collaboration with the community requires parent councils, schools, and educators to identify and utilize community assets and services to support the school community and children's education. According to Hale (2018), a village needs to raise a child and help them succeed in school. Family-school-community collaborations encourage parental help with schoolwork, leadership opportunities, local organization linkages, and more. Families and community members are active in student learning, boost academic achievement, and acquire champions who promote their success, making students feel more confident at school and taking on more challenging classwork.

Moreover, the indicator, *I take part in community and family social events at my child's school, such as sporting events, family days, and academic-related activities.*, has the highest Mean of 4.19 with SD=0.88, which is described as Often and interpreted as High. It means that parents actively engage in their children's school environment and partake in all kinds of social activities, including sporting events, family days, and other activities connected to the school. This implies that parental engagement shows how much parents respect their children's education and social growth and are prepared to put in time and effort to help the child and school. Additionally, parental participation in these activities may positively affect their child's social and academic outcomes, boosting academic success, motivation, and behavior. It can also strengthen the bond between parent and child and foster greater social integration within the school community.

On the other hand, the indicator *I suggest activities or school trips to teachers* has the lowest Mean of 2.71 with SD=1.49, which is described as Sometimes and interpreted as Moderately Low. It means that suggesting activities to the teachers is less concern for parents, especially since they find it difficult to afford it in their budget. This implies that parents' involvement in school activities is very important to develop, such as attending GPTA meetings to be updated in all school programs and HPTA meetings to be updated on their child's academic progress. Popirtac (2022) parents actively involved in the school's community can let teachers know their situation, and teachers can learn about their pupils' circumstances, including their difficulties, strengths, and the extent to which they receive support at home. The direct relationship between parents and teachers might help teachers understand learners' learning needs. Responsibility and accountability should be shared. Teachers bear big responsibility in ensuring the best education for learners. Nonetheless, parental involvement and support can significantly impact a child's academic performance.

Table 7
Overall Parental Involvement
Summary

Variables	Mean	SD	Description	Interpretation
Parenting	4.11	0.46	Often	High
Communicating	3.71	0.71	Often	High
Volunteering	3.77	0.60	Often	High
Learning at Home	4.19	0.52	Often	High
Decision Making	4.04	0.60	Often	High
Collaborating with Community	3.54	0.75	Often	High
Overall	3.89	0.61	Often	High

Note: 4.21-5.00 Very High 3.41-4.20 High 2.61-3.40 Moderate Low 1.81-2.60 Low 1.00-2.60 Very Low

Table 7 summarizes the respondents' parental involvement in parenting, communicating, volunteering, home learning, making decisions, and community participation. It has an Overall Mean of 3.89 with SD = 0.61, which is described as Often and interpreted as High. It means that parents are incredibly committed to their child's academic success and development. Parents supporting their children in school improves their child's academic achievement, and they give importance to how their involvement as a parent greatly affects their child's performance in achieving excellent academic results. This implies that a child's progress in school is greatly influenced by parental participation. It supports effective supervision and encouragement, promotes direct communication between parents and teachers, and enhances the learning

experience. Thus, a child's academic progress and future opportunities are significantly impacted by parents who are fully involved and supported in their education. Parental involvement is seen as an essential strategy for advancing the level of education. Waluyandi et al. (2020) study about parents' involvement in their children's school education is seen to have a good impact on the growth of children as learners in reaching their educational goals in schools, both academic and non-academic, which include numeracy development performance.

Meanwhile, parental involvement in *learning at home* obtained the highest Mean of 4.19 with SD = 0.52, which is described as *Often* and interpreted as High. It means that parents are very involved in learning at home. This implies that parents' active involvement in learning at home has a positive effect on their children's academic performance and personal growth because it gives them a supportive learning environment, chances to practice, and personalized feedback and guidance, which fosters a love of learning and builds their confidence and motivation. This finding is supported by Panaoura (2021), who says that parental involvement needs two essential factors to enhance or improve learners' achievement, especially in mathematics. Commitment comes first, followed by parental involvement in the child's education on an active basis.

On the other side, parental involvement in community collaboration had the lowest Mean score, 3.54, with SD = 0.75, which is often and is viewed as High. This means community involvement from parents can significantly improve a child's academic performance. Parents can provide their children with a comprehensive support system by establishing a supportive network, extending learning opportunities, promoting positive role models, fostering social and emotional development, and fostering a sense of belonging. It implies that through this collaborative endeavor, parents, schools, and the greater community can work together to ensure each child's academic achievement and overall development. Parental involvement in mathematics education had a positive association with pupils' mathematics achievement, according to Fan and Chen's research (2020).

Problem 2. What is the academic performance of Grade 2 Learners for the School Year 2022-2023?

Table 8

Mathematics Academic Performance of Grade 2 Learners for the Second Quarter of School Year 2022-2023

Grade Range	Frequency	Percentage
90-100	18	12.00
85-89	53	35.33
80-84	71	47.33
75-79	8	5.33
Below 75	0	0.00
TOTAL	150	100.00

Note: 90-100 Outstanding 85-89 Very satisfactory 80-84 Satisfactory 75-79 Fairly Satisfactory
Below 75 Did not meet the expectations

The academic progress of Grade 2 Learners for the School Year 2022–2023 is shown in Table 8 on the following page. It reveals that 47.33% of the learners' academic performance was at a satisfactory level, 35.33% of the learners had a performance at a very satisfactory level, 12.00% of the learners had an academic performance at an outstanding level, and 5.33% of the learners had a performance at a fairly satisfactory level. This means the learners' academic performance is being met with a level of satisfaction. This implies that parents being involved in their child's math learning has beneficial outcomes, which include assisting with homework, engaging in math-related activities at home, and maintaining regular contact with the teacher, which is a greater probability to result in outstanding mathematics performance in children. Given how important parental involvement is for children's mathematical growth, teachers and parents should collaborate to promote and encourage this kind of involvement. Llego (2022) asserts a link between parental

involvement in a child's education and academic achievement. When parents invest in their children's education, they can support their success in school and life.

Problem 3. Is there a significant relationship between parental involvement and the Mathematic academic performance of learners?

Table 9

Result of the Test on Relationship between Parental Involvement and Mathematics Academic Performance of Grade 2 Learners

Parental involvement * Numeracy Performance	Mathematics		Interpretation
	R	P	
Parenting	0.501	0.001*	Significant
Communicating	0.480	0.001*	Significant
Volunteering	0.442	0.001*	Significant
Learning at Home	0.531	0.001*	Significant
Decision Making	0.492	0.001*	Significant
Collaborating with Community	0.538	0.001*	Significant

Note: r = correlation coefficient; P = probability value; * = Significant at 0 .05 level

Table 9 displays the relationship between parental involvement and the Mathematics academic performance of Grade 2 Learners. Results revealed that parental involvement in community collaboration obtained the highest r value of 0.531 with a P value of 0.001*, interpreted as Significant at 0.05 level. This means parents' collaboration with the community can produce a support network for a child's numeracy performance. This implies that parents' collaboration with community members can advocate for learners' education and ensure schools accommodate the needs of all learners, especially in improving pupils' mathematics skills. By working together, parents, schools, and community members can create a more inclusive and equitable education system. According to Salac and Florida (2020), the community and schools function as a single entity, and engagement with all aspects of the community is necessary for children to reach their maximum potential. The value, culture, and educational opportunities that schools should provide for learners are strengthened and enhanced by community and school collaboration. As teachers, parents, and the more comprehensive community work to promote learning, pupils tend to earn higher grades, attend school more frequently, remain enrolled for longer, and participate in more advanced programs.

On the other hand, parental involvement in *Volunteering* obtained the lowest r value of 0.442 with a P value of 0.001*, also interpreted as Significant. It means that parents volunteering in schools is a great way to create a more supportive and engaged learning environment and improve numeracy performance for learners. This implies that volunteering involvement can assist teachers with classroom tasks, help with school events, and support learners with academic struggles. Also, parental Volunteering can help learners improve in school and be more motivated. Parents' active involvement in a child's education sends a powerful message that education is essential and valuable, reinforcing positive attitudes toward learning and motivating learners to perform well in school. Volunteering can also help build solid relationships between parents, learners, and teachers.

These findings, supported by Cauilan and Salazar's (2022) study, stated that there are various ways that parents can help enhance the educational opportunities and school services available to their children. Following their areas of expertise, they can volunteer for projects like helping to provide learning and school facilities and equipment, tutoring or co-teaching, and providing career awareness information. For instance, the Brigada Eskwela initiative in public primary education institutions, which involves the community and learners' families joining together through volunteer services and donations, has greatly aided the teachers, schools, and the government. This initiative has dramatically aided primary education in terms of the unity of

purpose and, to a lesser extent, in improving academic performance and school physical amenities (Garcia, 2021).

4. Conclusions and Recommendations

The following findings are derived from the research:

1. Parental involvement in learning at home was the parents' highest extent regarding their involvement in the learners' numeracy performance. Parents who provide their children with homework support and engage them in mathematical activities at home are likelier to have children who perform well in mathematics.

2. Learners performed satisfactorily in their mathematics.

3. Parental involvement in parenting, communicating, learning at home, making decisions, volunteering, and working with the community was significant to the numeracy performance of the Grade 2 learners.

The following recommendations are made based on the study's results and conclusions:

1. Collaboration between teachers, parents, and community members is crucial for promoting learners' success and achieving high numeracy performance. Parents and teachers may work together in seeking opportunities to collaborate with community members, including local organizations, businesses, and other families, to establish support and create a meaningful learning environment that fosters academic achievement.

2. Parents and teachers may work together to promote numeracy performance by creating activities that make numeracy fun and engaging. Parents may communicate with their children about numeracy and help them practice basic skills such as counting, addition, and subtraction through everyday activities like cooking, shopping, or playing games. And teachers can give learning aids and should regularly communicate, deliver progress reports, and encourage parents to engage in school events and motivate them to express their concerns.

3. Parents can boost academic success in mathematics by actively participating in their child's education by creating a supportive learning environment at home, collaborating with the child's school and community, and volunteering when possible.

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