© IJARW | ISSN (O) - 2582-1008
November 2025 | Vol. 7 Issue. 5
www.ijarw.com

SOCIO-ECONOMIC STATUS, TECHNOLOGICAL EXPOSURE, AND STUDENTS' PERFORMANCE IN MATHEMATICS

Kylah S. Arcayan [1], Jenyliza T. Ucang [2]

College of Education, Central Mindanao University, Bukidnon, 8710, Philippines

ABSTRACT

Socio-economic status means a student's place in society based on the family's income and living conditions. Technological exposure means how often students use gadgets and the internet to help them learn. This study involved 50 Junior High School students from Little Baguio National High School in San Fernando, Bukidnon, during the 2024–2025 school year, selected through stratified sampling. Data were gathered using a checklist for socio-economic status, a 4-point scale for technology use, and students' previous quarter math grades, and analyzed through frequency, mean, and Pearson's correlation. Most students (68%) belonged to the Upper Lower Class, with fair technology exposure and satisfactory math performance. Findings showed no significant relationship between socio-economic status, technology use, and math performance, suggesting that math achievement is not solely influenced by family background or access to technology. The study recommends stronger collaboration among students, parents, teachers, and the government to improve math outcomes further. It also encourages future research to examine other factors, such as self-confidence and peer support, that may contribute to students' success.

Keyword: socio-economic status, technological exposure, no significant, mathematics performance, descriptive-correlational, relationship

1. INTRODUCTION

Mathematics is an important subject because it helps students think clearly and solve problems (Favero, 2006). Being good at math trains the brain and improves problem-solving skills. It also gives students more chances to study in higher levels and find better jobs in the future (Hoyte, 2013; Stinson, 2004). However, in the 2022 Program for International Student Assessment (PISA), the Philippines ranked 77th out of 81 countries, showing that many students struggle in math and need more support.

Two important factors that affect student learning are socio-economic status (SES) and technological exposure. A study from the University of Bohol showed that students from low-income families often experience stress and lack access to technology, which makes school more difficult for them (Peñaflor & Bohol, 2023).

Socio-economic status (SES) is an important factor in a student's school performance because it describes the family's background and financial condition (Oakes & Rossi, 2023). It is often measured by parents' education, job type, and family income (Jeynes, 2002). Research shows that students from richer families often do better in school because they have more support, resources, and learning materials. In contrast, students from low-income families may find learning harder because they have limited access to books, digital tools, and quality materials. This lack of resources can make studying stressful and challenging (Eamon, 2005; Jeynes, 2016).

The Philippines ranks 84th out of 167 countries in terms of socio-economic status, which means it is in the middle range. Based on the Philippine Institute for Development Studies (PIDS), around 58.4% of Filipinos belong to low-income families, 40% are middle-income, and only 1.4% are considered wealthy. Because of this, many students cannot afford the technology needed in modern learning. Peñaflor et al. (2023) also state that a student's financial situation has a strong effect on their access to online learning tools, which can influence school performance. This shows that socio-economic status affects a student's technological exposure, which can either improve or limit their learning.

Technological exposure refers to how often students use gadgets, digital tools, and online

learning platforms. It includes having access to technology, knowing how to use it, and using digital tools for learning. Studies show that students who use educational technology regularly tend to do better in school (Prensky, 2001). Tan (2019) also found that technology can help students stay motivated and improve their math skills. But not all students have equal access to these tools. This creates a learning gap because some students can use interactive math programs, while others cannot.

To improve math performance, it is important to reduce the socio-economic gap and give students better access to technology. This study examines how socio-economic status and technological exposure affect students' math performance in Little Baguio National High School. Since only a few studies have been done in Little Baguio, San Fernando, Bukidnon, this research helps fill that gap by studying how SES and technology together influence students' learning in math. While most past studies focused on these factors separately, this research looks at their combined effects. The results may help teachers and school leaders create better teaching strategies and programs to support students in learning mathematics.

2. STATEMENT OF THE PROBLEM

The study examines the relationship between socio-economic status and technological exposure in connection to the Mathematics performance of Junior High School students at Little Baguio National High School. Specifically, it aims to answer the following questions:

1. What is the socio-economic status of students in the selected study population, in terms of;
    a) Parents' educational attainment;
    b) Parents' occupation; and
    c) Family monthly income
2. What is the level of students' technological exposure?
3. What is the level of students' academic performance in mathematics, as reflected in their grades?
4. Is there a significant relationship between students' performance in mathematics: and socio-economic; technological exposure?

3. METHODOLOGY

3.1 Research Design

This study used a descriptive-correlational research design to explore how socio-economic status, technological exposure, and students' performance in Mathematics were connected (Creswell, 2024). The descriptive aspect provided an overview of students' socio-economic backgrounds, access to digital learning tools, and academic performance, while the correlational analysis examined the strength and direction of these relationships.

3.2 Locale of the Study

This study was conducted at Little Baguio National High School, located in Barangay Little Baguio, San Fernando, Bukidnon, in Northern Mindanao, Philippines. The school is near important landmarks like the Roman Catholic Church and Little Baguio Public Cemetery.

The school was first established in 2004 as Halapitan National High School - Little Baguio Annex. In 2015, it became an independent school under Republic Act No. 10736. Today, it is a fully functioning high school with 31 teachers and staff and 486 students enrolled, including those in Senior High School.

This school was chosen for the study because of its different social and economic conditions and the varied backgrounds of its students. As the only high school in Barangay Little Baguio, it plays an important role in students' education and personal growth. With its dedication to academic excellence, the school provides a good setting to study the factors that affect students' performance in Mathematics.

3.3 Participants of the Study

This study included 50 Junior High School (JHS) students from Little Baguio National High School in San Fernando, Bukidnon during the 2024-2025 school year. These Junior High School students were chosen because (a) JHS is a crucial stage in learning where students develop important skills that prepare them for higher education. (b) JHS students are still adjusting to structured math lessons, making them more affected by factors like technology use and family income. (c) JHS rely heavily on support from parents, school resources, and their community, which can influence their learning experiences. To ensure fairness, the

students was selected systematically from each section to create a balanced group for the study.

3.4 Data Gathering Procedure

To ensure the study followed ethical guidelines, the researcher wrote a letter requesting permission from the School Principal of Little Baguio National High School. Before distributing the survey questionnaire, the researcher sought the students' consent. They were informed that participation in the study was voluntary, and they were not required to take part if they did not wish to. Their privacy was respected, and their responses were kept confidential and used solely for research purposes. The results were aggregated so that no individual student could be identified. Additionally, students had the right to skip any personal questions they did not wish to answer.

3.5 Statistical Techniques

The gathered data was carefully analyzed using appropriate statistical tools to ensure accurate and meaningful insights. Descriptive statistics, such as mean, standard deviation, and frequency were used to evaluate the level of students' socio-economic status, technological exposure, and academic performance in mathematics.

To analyze the relationships between these variables, inferential statistics was utilized. In particular, the Pearson Product-Moment Correlation used to assess whether there is a significant relationship between socio-economic status and students' performance in mathematics, as well as the correlation between technological exposure and math achievement.

Meanwhile, the following methods were employed for scoring:

A. Socio-economic Status

Total Score	SOCIO-ECONOMIC CLASS
26-29	Upper class (I)
16-25	Upper middle class (II)
11-15	Lower middle class (III)
5-10	Upper lower class (IV)
Below 5	Lower class (V)

B. Technological Exposure

SCALE	DESCRIPTIVE RATING	QUALITATIVE INTERPRETATION
1	Never	Poorly Exposed
2	Sometimes	Fairly Exposed
3	Most of the time	Moderately Exposed
4	Always	Well-Exposed

C. Mathematics Performance

SCALE	DESCRIPTIVE RATING	QUALITATIVE INTERPRETATION
90-100	Outstanding	The student excels in all key learning domains: knowledge, skills, and attitude.
85-89	Ver Satisfactory	The student performs very satisfactorily with effective knowledge and skill application.
80-84	Satisfactory	The student performs satisfactorily, showing fundamental knowledge, skills, and understanding of the topic.
75-79	Fairly Satisfactory	The student shows minimal skills and needs further support.
Below 75	Did Not Meet Expectation	The student struggles to understand concepts and lacks basic skills and competencies.

4. RESULTS AND DISCUSSION

Table 1. Summary of Socio-economic status

Total Score	FREQUENCY	QUALITATIVE INTERPRETATION
26-29	0	Upper class (I)
16-25	5	Upper middle class (II)
11-15	11	Lower middle class (III)
5-10	34	Upper lower class (IV)
Below 5	0	Lower class (V)
Overall	50	

Legend:

Total Score	Qualitative Interpretation
26-29	Upper class (I)
16-25	Upper middle class (II)
11-15	Lower middle class (III)
5-10	Upper lower class (IV)
Below 5	Lower class (V)

The data shows that no families belong to the Upper Class or Lower Class. Only 5 families (10%) are in the Upper Middle Class, which means they have good jobs and earn a steady income. There are 11 families (22%) in the Lower Middle Class, meaning they can afford their basic needs but have little extra money. Most families, 34 out of 50 (68%), belong to the Upper Lower Class. This means they have enough money for food, clothing, and other daily needs, but not for extra things. Many families have low or average income, and this can affect their lifestyle and their children's school performance.

Some students may not have complete school supplies, books, or gadgets like phones or computers. Others may not have internet at home, making it hard for them to do homework or search for information online. Because of these problems, students may struggle to keep up with lessons.

Some also feel tired because they help with household chores or work to support their families.

These findings are supported by Coleman and his team (2018), who said that a student's family background plays a big role in their school performance. Murnane (2019) explained that students from families with limited money often face more challenges in school. Neuman and Celano (2012) found that students who have more books at home usually perform better, so those with fewer learning materials may find studying more difficult. Vigdor et al. (2014) also noted that students from low-income families may struggle because they lack access to technology for learning. Their study showed that students whose parents have good jobs and higher education usually do better in school. Meanwhile, students from families with less income or lower education levels may find learning harder because they do not have enough support or materials at home. Murnane (2019) also pointed out that the gap between rich and poor students has increased over time.

4.1. Parents Educational Attainment

This part shows the educational level of the students' parents. The table 5 below tells how many parents finished elementary, high school, college, or more. This helps us understand the kind of school background the students' families have.

Table 2. Summary of Socio-Economic Status in Terms of Parent's Education Attainment

INDICATOR	Frequency	Percent
Illiterate	1	2.0
Elementary	15	30.0
High School	21	42.0
Undergraduate	7	14.0
Graduate	5	10.0
Doctoral Degree	1	2.0
OVERALL	50	100.0

Legend:

Total Score	Qualitative Interpretation
26-29	Upper class (I)
16-25	Upper middle class (II)
11-15	Lower middle class (III)
5-10	Upper lower class (IV)
Below 5	Lower class (V)

Out of 50 parents, most of them (42%) finished high school. Some parents (30%) only completed elementary school, while a few (14%) started college but did not graduate. A small number (10%) finished college, and only 2% reached the highest level of education, which is a doctoral degree.

This means that many parents in the study completed only basic education, and only a few reached colleges. A parent's education can affect the type of job they get and how much they earn, which can also influence how well their children do in school. Since most parents only finished high school or less, they may find it hard to help their children with homework, especially in difficult subjects. They may also give less academic support or guidance compared to parents with higher education. Parents who did not finish college may also have lower expectations for their children because they themselves did not experience college. Only a few parents can guide their children about different careers or academic paths.

Because of this, it is important for schools to give extra support to these students. Schools can offer tutoring, study programs, or workshops for both students and parents. This support can help students improve even if their parents cannot assist them much with schoolwork.

Research by Haveman and Wolfe (1995) supports this idea. Their study shows that children whose parents have higher education levels usually perform better in school because educated parents can guide their children and support their learning. Davis-Kean (2005) also explains that parents with more education are more involved in their children's schoolwork, which helps students do better. In this study, most parents have only basic education, which may explain why they might find it hard to help their children academically or set high expectations for them. Jeynes (2016) found that parents with higher education tend to set higher expectations and are more active in helping with homework. Ermisch and Pronzato (2010) also found that a mother's education strongly affects a child's thinking and learning development. This matches the findings of this study, where many parents have lower education levels, which may result in less support and learning opportunities for their children.

4.2. Parents Occupation

This part describes the types of jobs that the students' parents have. Table 3 below shows how many parents work in offices, on farms, or in other

types of jobs. It helps us understand how the parents earn money and support their families.

Table 3. Summary of Socio-Economic Status in Terms of Parents' Occupation

INDICATOR	Frequency	Percent
Unskilled worker	1	2.0
Semi-skilled worker	15	30.0
Skilled worker	21	42.0
Clerical/Shop/Farm	7	14.0
Semi-professional	5	10.0
Professional	1	2.0
OVERALL	50	100.0

Legend:

Total Score	Qualitative Interpretation
26-29	Upper class (I)
16-25	Upper middle class (II)
11-15	Lower middle class (III)
5-10	Upper lower class (IV)
Below 5	Lower class (V)

Most parents (46%) work in offices, shops, or farms, while 28% are skilled workers. A smaller group, 10%, are unskilled workers, 8% are semi-professionals, 6% are professionals, and 2% are semi-skilled workers.

Parents who work in offices, shops, farms, or in skilled jobs often earn less than those in professional careers. Because of this, they may find it hard to provide extra help for their children, such as tutoring, learning activities, or saving for college. A parent's job can also shape their children's goals. Students whose parents work in low-paying jobs may not see many examples of higher-level careers at home. Parents with skilled jobs may have some useful connections, but not as many opportunities as those in professional careers. This can limit students' chances for internships, guidance, or future job opportunities.

The results of this study support earlier findings showing that parents' jobs affect how they support their children's education. Castillo and Gaspar (2021) found that parents with stable jobs can provide school supplies, while parents with low-paying jobs may struggle. De Guzman (2020) explained that professionals, such as teachers and doctors, often have more time and ability to help with homework, while parents who work long hours may not. Reyes and Villanueva (2019) also found that children of parents with steady jobs do better in school because they receive more support. This shows that a parent's job influences their income, their time, and their ability to help their children succeed in school.

4.3. Family Monthly Income

This part explains how much money the students' families earn each month. Table 4 below tells how many families have low, middle, or high incomes. It helps us understand how families afford their daily needs and support their children in school.

Table 4. Summary of Socio-Economic Status in Terms of Family Monthly Income

INDICATOR	Frequency	Percent
10,957 and below	21	42.0
10,957-21,914	15	30.0
21,915-42,828	6	12.0
43,829-79,699	3	6.0
79,700-131,484	3	6.0
219,141 and above	2	4.0
OVERALL	50	100.0

Legend:

Total Score	Qualitative Interpretation
26-29	Upper class (I)
16-25	Upper middle class (II)
11-15	Lower middle class (III)
5-10	Upper lower class (IV)
Below 5	Lower class (V)

Most families (42%) earn 10,957 pesos or less per month, while 30% earn between 10,957 and 21,914 pesos. This means that many families have low incomes. Some families (12%) earn between 21,915 and 42,828 pesos, and only small groups earn more than this. Only 4% of families earn 219,141 pesos or more per month.

Since 42% of families earn 10,957 pesos or less, many of them have very limited money. This makes it hard to pay for basic needs such as food, housing, and healthcare. Some students may even miss school to help earn money for their families. Low income also affects how much families can spend on their children's education. Financial stress can affect the family's well-being and stability. When parents worry about money, they may experience poor mental health, and this stress can affect their children's school performance and home life.

A family's income has a big effect on a student's education. Families with higher income can provide better school supplies, tutoring, and a good learning environment, which can help students do well in school (Santos & Ramirez, 2022). Cruz (2021) also found that financially stable parents can buy important learning materials, such as books, gadgets, and internet access.

In contrast, not having enough money can make school harder for students. Garcia and Dela Rosa (2020) found that children from low-income families may struggle because they do not have complete school supplies or cannot afford school expenses. Torres and Villanueva (2019) explained that financial stress at home can make students feel worried or anxious, which makes it harder for them to focus on their studies.

Table 5. Summary of Technological Exposure

VARIABLE	MEAN	SD	QUALITATIVE INTERPRETATION
Technological Exposure	2.45	0.85	Fairly Exposed

Legend:

SCALE	DESCRIPTIVE RATING	QUALITATIVE INTERPRETATION
1	Never	Poorly Exposed
2	Sometimes	Fairly Exposed
3	Most of the time	Moderately Exposed
4	Always	Well-Exposed

Table 5 shows the level of students' exposure to technology. The results indicate that students have a moderate level of technological exposure, with an overall average score of 2.45. The standard deviation for all indicators ranges from 0.72 to 0.97, which means there is moderate to high variation in their answers. In simple words, some students have similar experiences with technology, but others have very different levels of access or comfort using it.

The findings show that students sometimes use technology for schoolwork, but they do not rely on it all the time. They may still use books, ask their teachers, or finish their tasks without using gadgets. Some students like using online tools for learning math because videos, games, and interactive examples make lessons more fun and easier to understand. However, other students may feel unsure or uncomfortable using technology because they have limited experience or are afraid of making mistakes.

Table 6. Summary of Students' Mathematics Performance

VARIABLE	MEAN	SD	QUALITATIVE INTERPRETATION
Academic Performance	84.66	5.46	Satisfactory

Legend:

SCALE	QUALITATIVE INTERPRETATION
90-100	Outstanding
85-89	Very Satisfactory
80-84	Satisfactory
75-79	Fairly Satisfactory
Below 75	Did Not Meet Expectation

The table shows that 13 students received an outstanding grade, while 16 students got a very satisfactory grade, making up 32% of the class. Another 12 students earned a satisfactory grade, and 8 students were in the fairly satisfactory category. Only 1 student did not meet expectations. This means that most students understand their math lessons and perform well in their tests. Many students received satisfactory to outstanding grades, showing that they are learning effectively. However, some students had lower scores, which means they may need additional help to improve.

Overall, the results show that most students are meeting or even exceeding the expected standards. But the students who received satisfactory or fairly satisfactory grades may still need extra support, such as tutoring, more practice activities, or different teaching approaches to help them understand better. The one student who did not meet expectations may need more individualized attention or a different learning strategy. While the high number of students doing well is encouraging and can motivate others, it is still important to guide and support those who struggle so they can build confidence and improve their performance.

According to Jablonka (2020), doing well in Mathematics is not only about getting high grades, but also about using math in real-life situations and thinking critically. Similarly, Capuno et al. (2019) pointed out that students in the Philippines still need improvement in Mathematics. This was shown in the 2016–2017 Global Competitiveness Report, where the Philippines ranked 79th out of 138 countries in math and science education. This means there is a

need to strengthen how Mathematics is taught in schools.

Yang et al. (2021) also explained that students' feelings and emotions affect how well they perform in math. A positive learning environment and support from teachers help students do better. This idea is supported by Hamre and Pianta (2015), who found that students who feel comfortable with their teachers tend to perform better in school.

Darling-Hammond et al. (2017) emphasized that students learn more when teachers use different teaching methods that match their learning styles. Teachers who continue improving their teaching strategies can help students succeed. Getachew and Birhane (2016) also found that students who believe they are good at math try harder and perform better.

Table 7. Relationship of Socio-Economic Status, Technological Exposure, and Students' Performance in Mathematics

	Pearson Correlation	Sig. (2-tailed)
Socio-Economic Status	-.081**	.000
Teachers' Effectiveness	-.044**	.000

Table 7 shows the results of the correlation analysis between socio-economic status and academic performance in Mathematics. The analysis shows a weak negative correlation (r = -0.081, p = 0.578). Since the p-value is higher than 0.05, the null hypothesis is not rejected. This means that socio-economic status does not have a significant effect on students' performance in Mathematics. In simple words, students from low-income families can still perform well in math. They may be driven by their desire to succeed and improve their future, which pushes them to study harder.

This result also shows that academic performance is influenced by many other factors, such as motivation, study habits, school environment, and teacher support. It suggests that students from different income levels can succeed in math if they are given the right resources and encouragement. This may also mean that the school provides enough support, materials, and effective teaching strategies that help students learn well, regardless of their financial background. The results also show that the teaching methods used in mathematics are likely effective for different types of learners.

Kalaycioglu (2015) explained that socio-economic status can affect math performance, but factors like motivation, support, and thinking skills are equally important. Even if students from low-income families face challenges, they can still do well if they are motivated and receive the right support. This agrees with the findings of this study, which show that socio-economic status alone does not decide a student's math performance.

Other research supports this idea. Effiong, Ndidi, and Obogo (2020) found that a parent's income and education can influence a student's motivation. However, they also explained that the home environment and access to learning resources are just as important. This means that students from any socio-economic background can perform well in math if they have good support and stay motivated. The research confirms that socio-economic status is only one of many factors that affect student performance.

The results also show that technological exposure has a negligible correlation with academic performance in Mathematics (r = -0.044, p = 0.761). Since the p-value is greater than 0.05, the null hypothesis is not rejected. This means technological exposure does not significantly affect students' math performance.

In simple words, using gadgets and the internet does not automatically make students better at math. Having technology does not guarantee higher grades. Other factors—such as study habits, how teachers explain lessons, and how interested students are in learning—may be more important in improving math skills. Technology can be helpful, but what really matters is how students use it. Some students use gadgets mainly for games, videos, or social media, which can distract them from studying. Too much screen time can also make it harder to focus.

Meanwhile, students who do not use much technology may practice solving problems by hand, which can help them understand better. Whether students use technology or not, their performance depends on how they manage their time and how they use their learning resources.

The results of this study differ from some previous studies that say technology improves math learning. For example, Heid (1997) reported that students who use technology better understand math concepts. Iftikhar, Riaz, and Yousaf (2019) found that YouTube tutorials help students improve their math skills. Zhao et al. (2021) said digital tools like GeoGebra and Desmos make learning more fun and interactive.

However, some studies support this study's findings. Zhang and Trussell (2015) said too much technology use can weaken basic math skills. Ertmer and Ottenbreit-Leftwich (2010) explained that technology is only effective if teachers know how to use it well and if schools have enough resources. Other studies also show that technology can be a distraction. A study from arXiv (2024) found that technology can help learning, but it can also reduce focus and lower grades. ERIC (2021) found that students who multitask with different apps while studying often struggle with school performance.

5. CONCLUSIONS AND RECOMMENDATIONS

5.1 Conclusions

Based on the findings of the study, several conclusions can be drawn regarding the socio-economic status, technological exposure, and academic performance of students at Little Baguio National High School.

First, the socio-economic status of the students varies, with most belonging to the Upper Lower Class. Many parents finished high school, while others completed only elementary school. The parents also have different types of jobs, with most working in offices, shops, or farms, and some working as skilled workers. Many families earn below the average monthly income, which shows that students face financial limitations. Although their families can provide basic needs, they may find it difficult to afford additional requirements for school.

Second, the level of technological exposure among the students is fairly low. Although they have some access to technological tools, these are not fully integrated into their learning. Students may occasionally use technology, but it is not consistently used as part of their daily academic activities.

Third, the academic performance of the students in Mathematics is satisfactory. Students are able to understand some mathematical concepts, but there is still a need for improvement and deeper comprehension.

Finally, the Pearson Product-Moment Correlation analysis revealed no significant relationship between socio-economic status, technological exposure, and students' academic performance in Mathematics. The correlation values for both variables were weak, and the p-values were greater than 0.05. This means that socio-economic status and technological exposure do not significantly affect the students' mathematics performance. As a result, the null hypothesis was not rejected, showing that these factors do not have a meaningful impact on how well students perform in Mathematics, based on this study.

5.2 Recommendations

Based on the findings of the study, the following recommendations are made:

Parents play a big role in helping their children succeed in school. Even if they did not finish school or have high-paying jobs, they can still support their children by making a quiet place to study, talking about the importance of school, and giving emotional support. If money is tight, parents can look for free or low-cost learning tools, like printable worksheets or videos. Schools and teachers should also understand students' family situations so they can give help when needed, like giving free learning materials or checking in with parents.

Students should make the most of the technology they have. They can use free math apps, websites, or videos to learn more—even on a shared phone or at a community internet center. Teachers should help students use technology in class and offer printed copies when needed. Schools must try to get more devices and improve internet access. Policymakers can support this by giving out gadgets, setting up Wi-Fi areas, and working with groups that give free learning tools to poor families.

To help students improve their math grades, teachers should use easy-to-understand lessons, give real-life examples, and provide extra help for those who are struggling. Fun group activities and one-on-one support can also help students who are falling behind. Parents should check their

child's grades and talk to teachers to know how to help. With teamwork between home and school, students can improve their performance in math.

Students from poor families or with little access to technology often face more challenges in math. Teachers and school leaders should make learning fair by using different teaching styles and giving extra support. Policymakers should train teachers to use technology and create fair rules to give equal chances to all students. Future researchers should study how poverty, technology, and other things like confidence and peer support affect students' math performance. This can help schools and communities find better ways to support every learner.

6. ACKNOWLEDGMENT

This research would not have been possible without the support of many kind people. I thank God for giving me wisdom, strength, and guidance to complete this study. My heartfelt gratitude goes to Dr. Jenyliza T. Ucang, my adviser, for her guidance and valuable suggestions. I am deeply thankful to my family for their love and encouragement, to my guiding light for unwavering support, and to my friends for their help and inspiration. To everyone who contributed in any way, thank you for making this study possible.

REFERENCES

[1] arXiv. (2024). The impact of technology on student distraction and academic performance. arXiv Preprint, arXiv:2402.05249. https://doi.org/10.48550/arXiv.2402.05249

[2] Capuno, R., Necesario, R., Etcuban, J. O., Espina, R., Padillo, G., & Manguilimotan, R. (2019). Attitudes, Study Habits, and Academic Performance of Junior High School Students in Mathematics. International Electronic Journal of Mathematics Education, 14(3), 547-561.

[3] Castillo, M. R., & Gaspar, L. D. (2021). Parental employment and its impact on students' access to school resources. Journal of Educational Research and Development, 15(2), 45–53.

[4] Coleman, J. S. (2018). Equality of educational opportunity. Harvard University Press.

[5] Creswell, J. W. (2018). Research design: Qualitative, quantitative, and mixed methods approaches (5th ed.). SAGE Publications.

[6] Cruz, M. A. (2021). The role of financial stability in supporting student learning at home. Philippine Journal of Educational Research, 14(3), 22–30.

[7] Darling-Hammond, L., Hyler, M. E., & Gardner, M. (2017). Effective teacher professional development. Learning Policy Institute.

[8] Davis-Kean, P. E. (2005). The influence of parent education and family income on child achievement. Journal of Family Psychology, 19(2), 294-304.

[9] De Guzman, L. M. (2020). Parental involvement and its impact on student academic support at home. Philippine Journal of Education and Society, 12(1), 28–35.

[10] Eamon, M. K. (2005). Social-demographic, school, neighborhood, and parenting influences on the academic achievement of Latino young adolescents. Journal of Youth and Adolescence, 34(2), 163–175. https://doi.org/10.1007/s10964-005-3214-x

[11] Effiong, I. E., Ndidi, M. A., & Obogo, A. I. (2020). Parental Socio-economic Status as Correlates of Students' Motivation in Studying Mathematics in Calabar Education Zone of Cross River State, Nigeria. Journal of the Social Sciences, 48(3), 1586-1596.

[12] ERIC. (2021). The effects of multitasking with technology on college students' academic performance. Journal of Educational Psychology, 113(4), 667– 679. https://doi.org/10.1037/edu0000626

[13] Ermisch, J., & Pronzato, C. (2010). Causal effects of parents' education on children's education. Labour Economics, 17(1), 91-109.

[14] Ertmer, P. A., & Ottenbreit-Leftwich, A. T. (2010). Teacher technology change: How knowledge, confidence, beliefs, and culture intersect. Journal of Research on Technology in Education, 42(3), 255-284. https://doi.org/10.1080/15391523.2010.10782551

[15] Favero, M. (2006). Academic disciplines. The Gale Group. Retrieved from http://www.education.com/print/academic-disciplines/

[16] Garcia, M., & Dela Rosa, L. (2020). Socio-economic challenges and their effects on students' academic performance. Philippine Journal of Education and Development Studies, 5(2), 45–58.Gershenson, S. (2016). Parental income and students' academic success. Education Economics, 24(2), 139-157.

[17] Getachew, K., & Birhane, A. (2016). Improving students' self-efficacy and academic performance in Applied Mathematics through innovative classroom-based strategy at Jimma University, Ethiopia. Tuning Journal for Higher Education, 4(1), 119-143.

[17] Hamre, B. K., & Pianta, R. C. (2015). Can instructional and emotional support in the first-grade classroom make a difference for children at risk of school failure? Child Development, 76(5), 949-967.https://doi.org/10.1111/j.1467-8624.2005.00889.x

[18] Haveman, R., & Wolfe, B. (1995). The determinants of children's attainments. Journal of Economic Literature, 33(4), 1829-1878.

[19] Heid, M. K. (1997). The technological revolution and the reform of school mathematics. American Journal of Education, 106(1), 5-61.

[20] Hoyte, J. (2013). Mathematics: Going beyond the academic discipline.

[21] Iftikhar, M., Riaz, S., & Yousaf, Z. (2019). Impact of YouTube Tutorials in Skill Development among University Students of Lahore. Pakistan Journal of Distance and Online Learning, 5(2), 125-138.

[22] Jablonka, E. (2020). Critical Thinking in Mathematics Education. In: Lerman, S. (eds) Encyclopedia of Mathematics Education. Springer, Cham. https://doi.org/10.1007/978-3-030-15789-0_35

[23] Jeynes, W. H. (2016). Parental involvement and student achievement. Urban Education, 41(1), 82-110.

[24] Kalaycioglu, D. B. (2015). The influence of socioeconomic status, self-efficacy, and anxiety on Mathematics achievement in England, Greece, Hong Kong, the Netherlands, Turkey, and the USA. Educational Sciences: Theory and Practice, 15(5), 1391-1401.

[25] Murnane, R. J. (2019). The impact of family income on child education. Journal of Economic Perspectives, 33(1), 1-30.

[26] Neuman, S. B., & Celano, D. (2012). Giving children a fair chance. Harvard Education Press.

[27] Oakes, J., & Rossi, R. (2023). SES is a major factor in student success because it reflects a student's family background and financial situation. New York, NY: Academic Press.

[28] Peñaflor, K. B., & Bohol, U. (2023). Students' economic status and access to technology in relation to their academic stress on online learning at the University of Bohol. Academe University of Bohol, Graduate School and Professional Studies, 22, 25-27. Retrieved from https://ub-urc.ph/index.php/aubgsps/article/view/186/250

[29] Prensky, M. (2001). Digital natives, digital immigrants. On the Horizon, 9(5), 1–6. https://doi.org/10.1108/10748120110424816

[30] Republic Act No. 10736. (2015). An act separating the Halapitan National High School – Little Baguio Annex in Barangay Little Baguio, Municipality of San Fernando, Province of Bukidnon from the Halapitan National High School, converting it into an independent national high school to be known as Little Baguio National High School and appropriating funds therefor. Official Gazette of the Republic of the Philippines.

[30] Reyes, J. P., & Villanueva, M. A. (2019). Parental employment and academic performance among elementary students. Journal of Educational Studies in the Philippines, 10(1), 34–42.

[32] Santos, L. R., & Ramirez, D. T. (2022). Family income and its impact on student academic performance. Journal of Philippine Education and Development, 18(2), 51–60.

[33] Stinson, D. W. (2004). Mathematics as "gate-keeper" (?): Three theoretical

[304 Tan, D. A. (2019). Students' mathematics performance, engagement, and information and communication technology competencies in a flipped classroom environment. ResearchGate. https://www.researchgate.net/publication/334591505

[35] Torres, A. L., & Villanueva, C. P. (2019). The effects of financial stress on student well-being and academic focus. Philippine Journal of Educational Psychology, 9(1), 18–26.

[36] Vigdor, J. L., Ladd, H. F., & Martinez, E. (2014). Scaling the digital divide: Home computer technology and student achievement. Economic Inquiry, 52(3), 1103– 1119. https://doi.org/10.1111/ecin.12089

[37] Yang, Y., Li, G., Su, Z., & Yuan, Y. (2021). Teacher's emotional support and math performance: The chain mediating effect of academic self-efficacy and math behavioral engagement. Frontiers in Psychology, 12, 651608. https://doi.org/10.3389/fpsyg.2021.651608

[38] Zhang, M., & Trussell, R. P. (2015). Supporting mathematics learning for students with learning disabilities through the use of technology. Journal of Special Education Technology, 30(1), 1-8. https://doi.org/10.1177/016264341503000101

[39] Zhao, N., Zhang, D., & McConnell, T. (2021). The role of digital tools in mathematics education: Enhancing conceptual understanding through interactive learning. Computers & Education, 168, 104193. https://doi.org/10.1016/j.compedu.2021.104193