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Parental Sentiments and Experiences with Sinugbuanong Binisaya Grade 2 Mathematics Modules

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Abstract. This study investigated the parents' sentiments and experiences in helping their children with Grade 2 Math modules in their native language, Sinugbuanong Binisaya. The research used a qualitative approach to understand these sentiments and experiences. Parents faced challenges due to unfamiliar mathematical terms in Sinugbuanong Binisaya, creating a language barrier for both them and their children. Additionally, some parents preferred English instruction due to concerns about their children's future academic and professional success. Despite these difficulties, the study also revealed positive aspects. Parents showed remarkable resourcefulness in supporting their children's learning. They found creative solutions like seeking help from family and friends, using online resources, and even implementing their own teaching methods. The experience led to a newfound appreciation for teachers' hard work and the challenges they face. This creates an opportunity for stronger collaboration between parents and teachers. The study suggests a multi-pronged approach to optimize this approach: revising Math module vocabulary for clarity, developing supplementary materials that integrate both Sinugbuanong Binisaya and English, and fostering collaboration between parents and teachers. Additionally, further research is needed to explore the long-term impact of Sinugbuanong Binisaya instruction on students' English proficiency and academic achievement.

Keywords: Grade 2 mathematics modules; Parents' experiences; Parents' sentiments; Sinugbuanong Binisaya

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1. Introduction

The educational landscape in the Philippines underwent a significant transformation with the implementation of the Enhanced Basic Education Act of 2013 (RA 10533). This legislation ushered in the era of Mother Tongue-Based Multilingual Education (MTB-MLE), a policy that prioritizes a student's native language as the foundation for learning (DepEd Order No. 74, 2009; RA 10533, Section 5, Paragraph f). Research has consistently documented the effectiveness of MTB-MLE in enhancing comprehension and academic achievement across various subjects (Roxas et al., 2015; Ricablanca, 2014). However, some parents have voiced concerns about the perceived impact of mother tongue instruction on future career prospects, questioning whether it adequately prepares children for a primarily English-speaking professional environment (Villalba, 2013).

The arrival of the COVID-19 pandemic further disrupted traditional educational practices. Schools were forced to adapt, embracing a "new normal" characterized by self-learning modules replacing face-to-face instruction (Pimentel-Tibon, 2020; Bendijo, 2020). This shift thrusts parents into a more prominent role, essentially transforming them into "para-teachers" for their children at home (Manlangit et al., 2020). They became responsible for guiding their children's learning journeys, often with limited resources and support.

This study delves into the sentiments and experiences of parents from a public school within the Division of Cagayan de Oro City, Philippines. These parents, acting as unexpected educators for their children, encountered significant challenges when presented with Grade 2 Mathematics modules written entirely in Sinugbuanong Binisaya, the local mother tongue. While previous research highlights the benefits of MTB-MLE, a crucial gap exists in our understanding of its effectiveness within a modular learning environment, particularly in a subject like mathematics – a field traditionally associated with standardized terminology and symbolic representation.

This study aims to explore the sentiments and experiences of these parents as they navigated the complexities of the Sinugbuanong Binisaya Grade 2 Mathematics modules during the pandemic. In so doing, the researchers can gain valuable insights into the potential benefits and drawbacks of using the mother tongue in mathematics education, especially in the context of a modular learning approach. This knowledge can inform future educational practices and policies, ensuring a more effective and inclusive learning experience for all students, both during and beyond the pandemic.

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2. Methodology

This study employed a qualitative approach, specifically a phenomenological method. Phenomenological research, as described by Mills et al. (2014), focuses on understanding the lived experiences of individuals or groups within a specific cultural and social context. In this case, the study aimed to understand parents' lived experiences in guiding their children through the Sinugbuanong Binisaya math modules. The researchers believed this approach would provide a rich and nuanced understanding of parents' sentiments and challenges.

The study participants were ten (10) parents of Grade 2 students enrolled at a Public School in the Division of Cagayan de Oro during the school year 2020-2021. These parents were specifically chosen as their children used the Sinugbuanong Binisaya Grade 2 math modules during the pandemic, thrusting them into a more active role in their children's education.

To gather in-depth data, the researchers employed semi-structured interviews. This type of interview allows for a predetermined set of questions while also offering flexibility to explore specific details and experiences that emerge during the conversation. Follow-up questions were used strategically to clarify points and gain a deeper understanding of parental perspectives. Prior to conducting the interviews, the researchers ensured the questions were clear, concise, and relevant to the study objectives. Three subject matter experts reviewed and validated the interview questions to ensure they effectively captured participants' sentiments and experiences.

Following the principles of descriptive phenomenology, the researchers employed a hermeneutic approach to analyze the interview data. Hermeneutics involves interpreting the meaning of participants' experiences within the context of the research question. Data analysis was iterative, meaning the researchers moved back and forth between individual responses and the overall dataset to identify recurring themes and patterns in parents' experiences. This approach allowed the researchers to develop a comprehensive understanding of the challenges and perspectives faced by parents in utilizing the Sinugbuanong Binisaya math modules

Prior to conducting the interviews, informed consent was obtained from all participants. Participants were assured of confidentiality and anonymity, and they had the right to withdraw from the study at any point. Additionally, permission was sought to record the interviews for accurate data transcription and analysis.

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3. Results and Discussion

In consonance to the data analysis framework of Dahlberg et al. (2008), the data gathered underwent three stages. Tables 1 to 5 present the sample meaning units, meaning clusters and themes that emerged from the parents' sentiments towards the Grade 2 Mathematics Modules in Sinugbuanong Binisaya.

Theme 1: Difficulties of using Sinugbuanong Binisaya in Math Modules

"It shows the opposite of the quality in teaching math by using our mother tongue, making some terms difficult to understand, which in fact, kids now are more dwelling in [social] media, [like] youtube."
"I was disappointed because some of the terms that was being used is very hard for the children to understand, they would find time to research it on google."
As parents, it is difficult to us to understand even it is Bisaya, especially in mathematics. Lawom kayo ang Bisaya nga ginagamit, kailan pa mag ask sa uban or i-google para masabtan. [There were deep Bisaya words used that need to be googled for me to understand the meaning.]
Honestly there are times or modules in math that is so hard for me to explain it to my kids kahit in Bisaya version na, kasi I really don't like numbers and am not good in it.

Parents in this study voiced significant frustrations with using Sinugbuanong Binisaya, their native language, for Grade 2 Math modules. Their concerns highlight the complexity of this issue. The findings reveal a central theme: navigating difficulties with unfamiliar terminology and a preference for alternative languages in Math instruction. Parents, like those quoted, encountered unfamiliar mathematical terms in Sinugbuanong Binisaya, creating a language barrier for some. This is particularly evident with "lawom" (deep) Bisaya words, which hindered comprehension for both parents and children.

These challenges resonate with wider discussions about mother tongue instruction in mathematics. While research acknowledges potential benefits for knowledge retention and student performance (Englis & Boholano, 2021), it also highlights complexities. Englis & Boholano (2022) emphasize the need for further exploration, particularly regarding effectiveness in specific contexts. This aligns with our findings, suggesting a one-size-fits-all approach to mother tongue instruction in Math might not be optimal. Interestingly, research using qualitative methods (Ozfidan, 2017) underscores the importance of understanding participant frustrations. Our study focused on parental concerns, providing valuable insights into the complexities of using Sinugbuanong Binisaya in Math modules. Parents also expressed a preference for English or Tagalog as mediums for Math instruction. This could stem from perceived difficulties with mathematical terminology in Sinugbuanong Binisaya or a belief that these languages are better suited for Math.

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This only portrays that using Sinugbuanong Binisaya in Grade 2 Math modules presents a multifaceted challenge. Acknowledging these difficulties and collaborating with all stakeholders including parents, teachers, researchers, Philippine educational system can move towards optimizing mother tongue instruction. This might involve reviewing module vocabulary for clarity, considering alternative instructional materials that strategically incorporate both mother tongue and English, and exploring teacher perspectives on using mother tongue instruction in Math education (Caspillo, 2022). Ultimately, a nuanced approach that considers the specific context and the needs of all involved is crucial for ensuring effective learning in mathematics education.

Theme 2: Concerns about future English language proficiency due to Math modules in Sinugbuanong Binisaya

"I did not agree because when the kids will go to the higher level, like High School and College, subjects are taught in English. Even when they graduate and look for jobs, the companies would prefer an applicant who can speak English."

"Puhon pagdako niya, English gyud ang mas ginagamit maong dapat, karon pa lang maanad na sya. Maong medyo dili ko uyon nganung naka-Bisaya ang module." [When my child grows up, English will be predominantly used, so he should get used to it. This is the reason why I am not that amenable on the Bisaya Module.]

Parents expressed anxieties that their children wouldn't develop strong enough English, potentially hindering their success in higher education and careers. This concern reflects a widely held belief that English proficiency is crucial for academic and professional success in many parts of the world. However, the research on the long-term impact of mother tongue instruction on English language proficiency is not entirely conclusive. While some studies, like Adesola et al. (2018), suggest potential benefits of initial mother tongue instruction on later math achievement, the long-term effects on English proficiency remain unclear. There are also potential downsides to prioritizing English over mother tongue education in math, particularly in the early years. Studies by researchers like Moyer (2008) suggest that using a child's native language can lead to better conceptual understanding in math. When students struggle with the language of instruction, they may have difficulty grasping the underlying mathematical concepts.

Therefore, the effectiveness of mother tongue instruction versus English-language instruction likely depends on various factors, including the specific context, the age of the learners, and the overall educational program design. More research is needed to explore the long-term effects of using Sinugbuanong

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Binisaya in Math education on Filipino students' English language proficiency and overall academic achievement. It is also important to consider that the findings in this study may not be generalizable to other contexts where English dominance is less pronounced. Additionally, the parents' concerns about future English language readiness could reflect a broader societal emphasis on English proficiency, rather than a direct reflection of their children's actual experiences within the educational system.

Theme 3: Parental Preference for English Language Instruction in Math Modules

I would suggest or recommend that terms of the mother tongue specially on the subject of mathematics that it will be easy to understand for the Grade 2 pupils.

"Mas maayo nga mintras bata pa sila may kaalam na sila sa English nga math miski dili man tanan dali masabtan atleast may idea na sila. Aduna nay MTB nga subject nga mas mo focus sa pag gamit sa binisayang module." [It would be better that even if they are still young they know know how to use English as a medium in doing Math; even if they don't understand everything, at least they would get the idea. Besides, there is already an MTB (mother tongue-based) subject where they used Bisaya module.]

From the verbatim responses of the parents, a clear theme emerged: a strong parental preference for English language instruction in these modules. This preference stemmed from several concerns. Parents, like Participants 8 and 6, encountered unfamiliar mathematical terminology in the Sinugbuanong Binisaya modules. This created a language barrier for them, making it difficult to explain concepts to their children. These concerns resonate with existing research on mother-tongue instruction in mathematics. Studies by Bermejo et al. (2022) and Caspillo (2022) highlight the importance of considering the language of instruction and exploring teacher perspectives on using the mother tongue in Math education. These studies suggest a need to carefully evaluate the effectiveness of this approach in this specific context.

However, Pillos et al. (2020) found evidence that mother-tongue instruction can improve student performance in math problem-solving. This suggests potential benefits that shouldn't be entirely overlooked. The key takeaway lies in finding a balanced approach that acknowledges both the parents' concerns about difficulty and clarity and the potential benefits of using Sinugbuanong Binisaya identified in research. This balanced approach should consider the specific needs of the students, the curriculum goals, and the broader educational context.

Theme 4: Parental Strategies to Support Learning with Sinugbuanong Binisaya Modules

"I ask help from friends. Sometimes I give them a reward just to motivate them to answer."

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"Making pa surprise para hindi magwala during study time kasi moody ang student ko". [I make surprises for my child for her to be interested in study time, especially that she is moody.]
"Nangutana sa akong parents, nag search sa google, naglantaw sa binisaya nga dictionary." [I asked my parents; search unknown words in google; browse vernacular dictionary.]
"I used the internet so that I can save time."

Despite facing challenges with the Sinugbuanong Binisaya Math modules, parents in this study displayed remarkable dedication to their children's education through various coping strategies. Parents implemented various strategies to bridge the language gap and support their children's learning. Some sought help from grandparents, leveraging their cultural and linguistic knowledge to clarify difficult terms. This aligns with research by Sung et al. (2020) who highlight the valuable role grandparents can play. Tech-savvy parents turned to online resources like translation tools, reflecting a growing trend of utilizing technology to enhance learning (Pathan & Hussain, 2022).

Furthermore, some parents employed additional teaching methods, demonstrating a proactive approach that resonates with research on parental involvement (Kim et al., 2019). One parent specifically mentioned using a vernacular dictionary, highlighting the importance of parental understanding of the curriculum content, even in a different language (Hill & Tyson, 2009). These diverse strategies employed by parents are a testament to their unwavering dedication to overcoming challenges and ensuring their children's success in mathematics education. Their resourcefulness and willingness to seek help or utilize additional resources highlight the depths of their commitment to their children's learning.

Theme 5: Newfound appreciation for teachers

"Na realize nako nga ang kalisod pagtudlo sa ako anak ug nahibaw-an pod nako kung aha sila hina nga subject ug unsa pod kalisod magtudlo sa mga maistra, ang naagian nila na experience nan amu na mga ginikanan karo ug dili saun di ay magtudlo sa isa ka estudyante." [I realize how difficult teaching my son is, and I learned what subject he is having a hard time; also I realized how hard teaching is; I now experience what the teachers experience, and as parents I learned that it is not an easy task to teach a student.]
"Being a teacher is not an easy job, I understand that sometimes teacher needs to rest too because it is so tiring working in the school not just taking care the kids but also making sure the kids learn. And I salute all teacher that can be a teacher and a mother at the same time."

While guiding their children, parents encountered difficulties that deepened their understanding of the complexities involved in teaching. This led to the theme: newfound appreciation for teachers. For instance, Parent 7 acknowledged the challenges of teaching even with one student. This resonates with Aksu's research (2017) which highlights how facing these hurdles can lead parents to

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develop a greater understanding of the demanding nature of classroom instruction. Similarly, Parent 3 expressed admiration for teachers who manage to balance work and personal life. This sentiment echoes Tschannen-Moran and Gareis' (2016) work on the demanding nature of the teaching profession. Through their struggles, parents gained a firsthand perspective on the juggling act teachers perform daily.

The appreciation extended beyond the general workload. Parents also recognized the teachers' efforts in using Sinugbuanong Binisaya for instruction. Caspillo's work (2022) emphasizes the importance of teachers' positive attitudes towards new curriculum approaches. This aligns with the parents' observations, suggesting that teachers' dedication to using Sinugbuanong Binisaya, despite potential challenges, is valued. The parents' experiences fostered a deeper understanding of the intricacies of teaching and the complexities of mother-tongue instruction. This newfound appreciation highlights the importance of collaboration between parents and teachers. Upon working together, parents and teachers can navigate the challenges and opportunities of using a child's native language in Math education, ultimately ensuring a more successful learning experience for all students.

4. Conclusions

This study explored parental experiences and sentiments with using Sinugbuanong Binisaya in Grade 2 Math modules. Parents expressed frustration due to comprehension challenges and concerns about future preparedness. While parents encountered unfamiliar mathematical terms, creating a language barrier for both them and their children, a strong preference for English language instruction also emerged. This highlights the complexities of mother-tongue instruction in Math education. Despite these difficulties, parents displayed remarkable resourcefulness. They sought help from family and friends, utilized online resources, and even employed additional teaching methods to support their children's learning. This dedication underscores the importance of parental involvement in education. Interestingly, the experience also fostered a newfound appreciation for teachers' hard work and the intricacies of their profession. This unexpected outcome highlights the potential for stronger collaboration between parents and teachers in navigating the challenges and opportunities of mother-tongue instruction.

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Based on these findings, a multi-pronged approach is recommended. First, a collaborative review of the Math module vocabulary can ensure clarity and alignment with children's existing language skills. Second, developing alternative instructional materials that strategically incorporate both Sinugbuanong Binisaya and English can bridge the language gap. Third, fostering open communication and collaboration between teachers and parents can address concerns and explore effective strategies for supporting home learning. Finally, further research is needed to explore the long-term impact of using Sinugbuanong Binisaya on students' English proficiency and overall academic achievement. Acknowledging parental concerns, fostering collaboration, and implementing these recommendations can lead to new steps for Philippine educational system to work towards optimizing mother-tongue instruction for the benefit of student learning and future success.

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