Lived Experiences of Public Elementary School Teachers on Hygiene Practices: A Phenomenology

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INTRODUCTION

Background of Study

Water, Sanitation, and Hygiene (WASH) is a comprehensive approach aiming to improve health, well-being, and quality of life by ensuring access to safe water, adequate sanitation, and proper hygiene practices (Hanchett, 2016). Additionally, the Sustainable Development Goals (SDGs) indirectly underscore the necessity of extending WASH services beyond households to attain universal and equitable access to safe and affordable drinking water, sanitation, and hygiene for all. Within the SDGs, there is explicit mention of WASH in Schools in Target 4, indicated by the criteria for proportion of schools with access to basic drinking water, single-sex basic sanitation, and basic handwashing facilities (UNICEF & WHO, 2016).

Conversely, Patil (2016) claimed that in developing and poor countries, inadequate and hazardous water, sanitation, and hygiene are significant causes of child mortality and morbidity. Further, teachers then play a vital role in being the informants of the school as well as the students' WASH practices, as the comprehensive water, sanitation, and hygiene in school (WINS) program has been implemented by the Department of Education (DepEd) and published under the DepEd order number 10, series of 2016).

Further, in the global scope, the investigation of Girmay et al. (2023) discovered that insufficient access to essential water, sanitation, and hygiene services in a sizable portion of Bishoftu Town's schools in Ethiopia poses a severe threat to the spread of various infectious illnesses. As Otsuka et al. (2019) observe, child health in low- and middle-income countries is primarily adversely affected by poor hygiene, lack of sanitation, and unsafe drinking water. In the same way, Maréchal et al. (2022) stress the need for the Arctic region's remote areas to reach more countries, as SDG 6 is the provision of sufficient safe water to improve the population's health.

Furthermore, many programs do not adequately involve local populations in the planning and implementation stages, leading to a lack of ownership and sustainability (Fagan, 2015). Inadequate education efforts can also lead to continued poor hygiene behaviors among communities, and existing WASH infrastructure is poorly designed or inadequately maintained, leading to service interruptions and health risks. Maintenance is often neglected due to insufficient trained personnel and funding (UNICEF, 2016). Additionally, gender disparities often result in women and girls facing barriers to accessing sanitation facilities, impacting their health and education (Boelens, 2019).

In the Philippines, poor water, sanitation, and hygiene (WASH) have resulted in diseases, causing approximately 15,000 deaths yearly in 2015, according to Vally et al. (2019). Furthermore, according to the United Nations Children's Fund (2020), 50.3 million Filipinos still lack access to adequately managed sanitary facilities. Subsequently, Rivera (2020) mentioned in her study the inclusion of the Department of Education (DepEd) order No. 65, s. 2009, stating that the most prevalent hygiene deficiency-related infectious diseases in public schools are caused by a lack of clean water and adequate sanitary facilities, which, if left untreated, can lead to malnutrition, poor physical growth, and other illnesses. such as anemia and a toothache. Rivera also pointed out that one of the difficulties encountered during the implementation of the WASH in School (WinS) Program in Tarlac Province included inadequate maintenance and administration costs for other health and nutrition facilities

Locally, within the study of Udto (2022) discussing the implementation of the WASH in Schools (WinS) Program

in Parang North District of Maguindanao II Division, his findings revealed that the proper execution of a school-based management approach has a significant impact on the implementation of the WASH in Schools (WINS) Program in terms of water, hygiene, sanitation, health education, and deworming. Parents and the community play a critical role in the program's success in addressing hygiene and sanitation issues affecting students vulnerable to various diseases due to a lack of access to correct hygiene and sanitation education, safe drinking water, and suitable facilities. Furthermore, Hasan et al. (2021) emphasized that promoting basic health science education (HSE) is crucial for achieving effective WASH practices among Indigenous Peoples (IP) in Barangay Lower Panaga, Panabo, Davao del Norte.

Notably, with global, international, and even local WASH challenges becoming more pressing, it is critical to investigate the hygiene practices among the elementary students in Island Garden City of Samal through the observational aid of teachers, as the school and students' practices in this regard can have long- term consequences for sustainable resource management and public health initiatives. Nonetheless, the persistent issue of hygiene practices remains low in the locale which significantly impedes the elementary students' ability to maintain proper sanitation and hygiene practices. Bridging this research gap is essential for increasing awareness, providing the necessary information for focused educational initiatives, and implementing policy measures to cultivate a generation of environmentally aware and responsible citizens.

This study has the potential to make a significant contribution to the literature by examining water, sanitation, and hygiene (WASH) practices, with a particular focus on hygiene. It may serve as a foundation for the local Department of Education (DepEd), City Health Office (CHO), and Rural Health Unit (RHU) to develop and implement programs that promote proper sanitation and hygiene among students. Additionally, the barangay could use the findings to enhance its water services based on the students' sanitation and hygiene practices. More importantly, students, with the support of their parents, could increase their awareness of the importance of access to safe and clean water for proper hygiene, thereby reducing their vulnerability to health risks.

Consequently, the researcher wants to present this study in a barangay session that will include stakeholders and community leaders to raise awareness and strengthen cooperative efforts to improve hygiene practices in schools. Also, the researcher wants to publish the research in regional, national, and international journals with the required approval, offering insightful supplemental material for further study in this field.

Purpose of the Study

This study aimed to investigate and understand the lived experiences of public elementary school teachers in the Island Garden City of Samal as they deal with issues related to water, sanitation, hygiene (WASH), emphasizing hygiene practices. It explores and understands the experiences of the teachers in handling hygienic issues in their learning environments. The study deals with the coping mechanisms and strategies the participants applied to overcome the challenges of producing hygienic and safe learning environments for their students.

Research Questions

This study aimed to explore and understand the lived experiences of public elementary school teachers in the Island Garden City of Samal regarding the implementation of hygienic practices of the WASH programs in their schools. This study sought answers to the following questions:

1. What are the lived experiences of teachers on the implementation of hygienic practices of the WASH program?

2. How do the participants cope with the challenges as regards the implementation of hygienic practices of the WASH program?

3. What insights can be shared with the academe and the community?

Theoretical Lens

I was guided through the lens of the **Integrated Behavioral Model for Water, Sanitation, and Hygiene (IBM-**

WASH) and **Integrated Water Resources Management (IWRM)** by Dreibelbis (2013). These conceptual models provide a scientific basis for understanding and tracking hygiene behavior in WASH programs operating in the education sector.

The IBM-WASH model describes how environmental, psychological, and technical factors determine WASH-related behaviors through the integration of various behavioral works and models. It would focus on the interaction of environmental constraints, social norms, and individual behaviors. Factors of importance include the provision of sanitary facilities, the influence of teachers and peers, as well as the knowledge held by the individual in practice on safe hygiene. During this, hygiene behaviors would be understood more correctly since the framework delivers sound insight on barriers and facilitators of WASH in schools.

These frameworks complement each other due to their different structural and behavioral factors affecting hygiene practice; while the IBM-WASH framework of Dreibelbis et al. (2013) adopted a behavioral perspective-with the model encompassing both social and individual dimensions regarding practice in WASH- the IWRM provides a resource management perspective in that it emphasizes a sustainable approach to WASH intervention. All of these would assist the researcher in grasping the issues associated with WASH.

In totality, the framework provides a generalized understanding of WASH practices in schools and inform the research. It is this dual approach that allows the study to provide practical insights and recommendations for improving hygiene behaviors and securing a more sustainable implementation of WASH programs. Due to the combination of the theoretical perspective with practical elements, the work also underlines the importance of the interplay with resources.

Importance of the Study

This research is significant as it would impact social knowledge in WASH (Water Supply, Sanitation, and Hygiene) practices in the Island Garden City of Samal public elementary schools. It could be used to aid them in creating and implementing more effective initiatives for proper hygiene and sanitation in learning environments. In addition, the Department of Education (DepEd) Island Garden City of Samal - division, City Health Office (CHO), and Rural Health Unit (RHU) in the Island Garden City of Samal might give them a sound basis for fostering collaboration, resource sharing, and well-integrated health promotion initiatives in schools. Thus, the barangay may utilize findings from this study to assist in fostering cleanliness initiatives and potable water systems with the local government and water services. Most importantly, this study may ensure that students and their families internalize and appreciate the essence of proper sanitation and hygiene practices. In addition, this study can serve as a valuable reference for future researchers examining the wider impacts of hygiene practices in educational settings.

Delimitation and Limitations of the Study

The research aims to uncover the lived experiences of teachers in public elementary schools located in the Island Garden City of Samal who are concerned with hygiene practices, with emphasizing the subject matter, locale, and population sample. Specifically, it aims to gather insights from public elementary school teachers at these schools, ensuring the research will be conducted under the supervision of a research adviser to adhere to ethical guidelines. The participants are required to be public elementary school teachers who are residence from Island Garden City of Samal and represent any gender expression. Participation is voluntary and any violation of the inclusion criteria will lead to disqualification from the study.

Definition of Terms

WASH Practices. WASH is a term that represents Water, Sanitation, and Hygiene. WASH practices are the activities, habits, and regulations which students and teachers adhere to ensure proper sanitation, utilization of water, and body hygiene. The behaviors to end the spread of diseases involve hand washing, sanitary latrines, saving of water, and cleanliness around.

WINS Program. WINS is an acronym for Wash in Schools. This program is being implemented by the

Department of Education to support and encourage appropriate water, sanitation, and hygiene practices in the classroom that will improve the health and academic performance of students. The WINS program includes building infrastructure, access to sanitary facilities and clean water, teaching people about hygiene, and routine assessment and monitoring of WASH- related activities.

Organization of the Study

In Chapter 1, I presented the research goal, research questions, and theoretical framework, as well as the limitations and delimitations of the research, and its scope and boundaries. In this chapter, the important words are also defined for improved comprehension. Also, a review of pertinent literature to put the study topic in context is also presented.

In Chapter 2, the details of methodology, approaches, research designs, data collection techniques, criteria for participant selection, and interviewing styles used in the study are provided. I also included in the description the assurance of the credibility and dependability of the qualitative research.

In Chapter 3, the results, together with participant profiles, life experiences, coping strategies, and the insights they offer to the academic community and society, are all covered.

In Chapter 4, I presented the discussion of the relevant qualitative results, explaining how they can impact instructional strategies. I also provided recommendations relevant to the findings and gave suggestions for further research.

METHODOLOGY

Covered in this chapter are the research design, research locale, research participants, data sources, data collection, data analysis, and ethical considerations.

Research Design

This study utilized qualitative research, particularly phenomenology, delving into real-world issues and offering deeper insights by investigating experiences, perceptions, and behavior, in contrast to quantitative research, which focuses on numerical data and interventions (Tenny et al., 2022). Also, instead of attempting to explain or quantify a lived experience, it aims to describe it, which sets it apart from other research approaches. (Makunika, 2022).

Further, qualitative research aims to examine and derive meaning from the data by looking at certain groups or locations (Crossman, 2021). In line with this, it is also giving a systematic and accurate description of a certain population, situation, or phenomenon, and it answers research questions by interviews or observations to be able to explore and understand the experiences of individuals or even groups of people (Creswell, 2013). Furthermore, qualitative research utilizes language to communicate the knowledge of the researchers regarding a certain topic. (Hennink et al., 2022)

Phenomenological research delves into varied reactions to, or perceptions of, a specific phenomenon (Fraenkel et al., 2023). Similarly, it is also an interesting approach to studying people and their perspectives on the world, their beliefs, and their views (Moran, 2020). Also, it explains the nature of the specific occurrence, which is the main goal of the phenomenological research (Creswell, 2014).

In addition to that, the phenomenological design is appropriate when using the qualitative research approach since its objective is to describe the characteristics of the participants and their lived experiences. Another point worth noting is that since this study focuses on the experiences of the participants with hygiene practices, the main goal of this phenomenological research is to describe the characteristics of the specific practice. A related view is presented that the study aims to relive the experiences of the participants, examine their thoughts in more detail, and fully understand these experiences as lived by each participant (Campbell, 2023).

Therefore, qualitative research, particularly phenomenology, was appropriate for this study since it allowed the

researcher to explore and understand the lived experiences of public elementary school teachers in relation to hygiene practices. Moreover, the best way to gather the insights of the participants is through phenomenology, which also assesses whether the researcher was objective and refrained from incorporating biases into the descriptions (Creswell, 2013). Further, it is focused on the lived experiences of participants while acknowledging their own connection to the phenomenon and practicing biases to avoid biases ((Neubauer et al., 2019).

Furthermore, this aligns with the view that phenomenological researchers start by examining firsthand information and drawing conclusions from firsthand narratives of the participants ((Fraenkel et al., 2023). Moreover, the main questions of the study were answered by organizing these lived experiences into meaningful clusters (Tomaszewski et al., 2020). In addition, phenomenological research, with its emphasis on individual perspectives and recognition of experiences, allowed the study to validate its results and achieve its purpose of understanding the depth of WASH-related concerns, particularly regarding hygiene practices in the school setting (Creswell, 2014).

Research Participants

The participants of this study were the 17 public elementary school teachers from the selected schools in the Island Garden City of Samal. There were 10 participants for the in-depth interview and seven for the focus group discussion. These participants were chosen through purposive sampling. Purposive sampling provides researchers the freedom to use their own discretion when selecting a sample by drawing on their existing knowledge of the population and the objectives of the study.

It was assumed by researchers that their knowledge of the population allowed them to assess whether a certain sample would accurately represent it (Fraenkel et al., 2023). These criteria served as the basis for the researcher to assess if the participants met the standards to obtain accurate data in line with the research questions. The inclusion criteria of the study are public elementary school teachers with a minimum of three years of teaching experience who are residents of the Island Garden City of Samal. In contrast, the exclusion criteria included those who have not personally experienced challenges in managing the hygiene practices of the students. To assess this, I personally asked the potential participants whether they had experienced any challenges or related circumstances before they signed the Informed Consent Form (ICF).

Further, the focus group discussion (FGD) included seven participants, while the in-depth interview (IDI) involved 10 participants. For instance, a systematic review found that on average, 9-17 interviews are needed to obtain saturation in interview-based qualitative research (Hennink and Kaiser, 2022). This is further supported that data saturation in theory-based interview research was reached by the 17th interview, meaning that this number was adequate for their qualitative analysis. (Francis et al., 2010).

The research took proactive measures to address potential risks, including ensuring that participants were not subjected to physical harm, psychological distress, or data breaches. Participants had the right to withdraw from the study at any time without penalty or loss of benefits. If a participant felt uncomfortable answering any interview questions, they had the freedom to decline or discontinue participation without consequences. The study ensured that participation was entirely voluntary and that participants were not waiving any legal claims, rights, or remedies due to their involvement.

Data Sources

The data sources for this study were the responses of public elementary school teachers within selected schools in the Island Garden City of Samal, Davao del Norte. These teachers voluntarily shared their lived experiences related to hygiene practices through in-depth interviews (IDI) and focus group discussions (FGD). Information gathered using research questions was done through face-to-face interviews. Specifically, a validated interview guide with open-ended questions was employed for data collection.

On one hand, the in-depth interviews aimed to understand the ideas, feelings, perceptions, beliefs, attitudes, and motives of the participants (Cruz, 2020). On the other hand, the study explored how the format of a focus group, be it online or in person, influences the quality and quantity of data collected. It found that in-person focus group

interviews allow deeper interaction among participants due to the ability to observe non-verbal cues, leading to more meaningful conversations (Hennink and Kaiser, 2022).

Thus, to ensure the accuracy and effectiveness of the questions, they were validated by experts in the field prior to the study. Additionally, to guarantee accurate transcription of all information, the interviews were recorded and carefully transcribed. The data were then analyzed by a data analyst. Another important consideration was the willingness of participants to take part in the study, which was carefully considered.

Data Collection

The first step in conducting this study was to ask for permission from the Dean of the Graduate School to conduct the study, which was noted, signed, and documented. Second, is to secure certification from the Research Ethics Committee (REC). Next, a guide for conducting interviews was required for the qualitative strand. The crafted interview guide was validated by the panel of experts. Thus, focus group discussions and in-depth interviews were used to collect data. The participants were made aware that this was an optional and private activity. That is, the informed consent form (ICF) was employed by the researcher, along with the objectives of the study.

The interview was conducted face-to-face. To ensure a thorough transcription of the responses of the participants, I recorded the entire in-depth interview session and focus group discussion using a recorder and notes. This was agreed to by the participants. However, one significant risk was discomfort that could arise from the lengthy interview and the inconvenience it may pose due to the busy schedules of the participants. Thus, the interview conducted at a date and time according to the availability and once agreed upon.

Consequently, if a participant felt uncomfortable answering any interview questions, they could choose not to respond to those that might cause psychological or emotional distress or could withdraw from the study altogether. The interview lasted for 30 minutes, depending on how the participants responded. I guaranteed the safety of the recorded interviews and ensured that all necessary precautions were taken to maintain their security. Additionally, the data collection process is stored in a secure environment to protect the data from unauthorized access or disclosure. The data collected were considered valid, as the information regarding the beliefs and actions of participants was thoroughly examined.

Additionally, Creswell (2013) also emphasized the importance of strictly adhering to protocols for collecting qualitative data, including FGD and IDI. The study guaranteed participant privacy and confidentiality by adhering to the Data Privacy Act of 2012 (Republic Act 10173), which states that any personally identifiable information collected for the study must be kept private. Thus, files containing the information were named in a way that only the researcher can recognize. Furthermore, when the results of the research were published or presented, no identifiable information was disclosed.

Data Analysis

In this qualitative study, Colizzi's method, a systematic and thorough approach created especially for phenomenological research, was used to analyze the data. The structured seven-step approach of Colaizzi's method, which ensures the extraction of rich and meaningful insights from the lived experiences of participants, has gained widespread recognition (Colaizzi, 1978). Thus, it is focused on a strong emphasis on the strong original meanings and context of participants. This method is especially well-suited for research that seeks to understand human experiences.

I started by transcribing the information gathered from in-depth interviews and focus groups. Further, to become familiar with the narratives of participants, transcriptions were read and reread. Furthermore, important statements that were relevant to the phenomenon were subsequently identified and extracted. After additional analysis, meanings were derived from these responses and arranged into theme clusters that represented shared experiences.

Moreover, to make sure that each theme appropriately represented the data while remaining distinct from the others, these thematic clusters were further refined and categorized. Also, to make certain that the themes were

authentic and consistent, I frequently reviewed the original transcripts. A thorough description of the phenomenon was then created using these themes. I took Colaizzi's last step, which was to give the results back to the participants for verification, to increase the credibility of the findings. Hence, I follow Colaizzi's method for the in-depth and thoughtful data analysis procedure, which ensures that what was important of the experiences of the participants with classroom hygiene practices was precisely recorded and insightfully analyzed.

Trustworthiness of the Study. The study explored the professional and personal experiences of teachers in handling hygiene practices in a school environment. I ensured the reliability of the results was essential because qualitative research mostly depended on understanding human experiences. In qualitative research, trustworthiness was characterized by the credibility and dependability of the findings.

According to Lincoln and Guba (1985), trustworthiness was an essential element of qualitative research to guarantee the dependability and rigor of the results. They identified credibility, transferability, dependability, and confirmability as the four essential elements of trustworthiness. Also, the quality and validity of the data were referred to as credibility, and they could be improved by using techniques like participant verification and triangulation. Additionally, the extent to which findings, supported by in-depth and thorough explanations that could be applied to many contexts, was known as transferability. The consistency of the study process was addressed by dependability and confirmability, which also made sure that participant experiences, not bias from researchers, were reflected in the results of the study.

Credibility. I made sure that rigor was continuously upheld during the data gathering process, especially during the interviews, to determine the credibility of my study. I just used accurate information and avoided assuming anything or coming to any conclusions that were not validated by the responses provided by the participants. By considering and incorporating the viewpoints of all ten in-depth interview (IDI) and seven focus group discussion (FGD) participants, credibility was further strengthened, and their lived experiences were presented in an authentic manner.

According to Koch (1994), maintaining credibility required the researcher to be self-aware throughout the research process. Pre-interviews were conducted to evaluate whether the interview questions could elicit rich, relevant data aligned with the study's themes, as suggested by Elo et al. (2014). The credibility of the study was further enhanced by clearly identifying and describing the participants who were teachers from the Island Garden City of Samal, ensuring relevance and contextual clarity. In line with Graneheim and Lundman (2004), appropriate data collection methods, such as in-depth interviews (IDIs), were selected to suit the content analysis. Finally, strict adherence to methodological procedures and expert review helped reinforce the trustworthiness and rigor of the research process.

Transferability. I included a thorough and in-depth description of the study, including the environment, participants, and methods, which closely matched the phenomena being studied to guarantee transferability in my qualitative research. Also, I explained the background of the study and underlying assumptions using detailed descriptions so that the participants could completely comprehend the setting in which the research was conducted. All pertinent information was provided as openly as feasible to allow future researchers or practitioners who wanted to use the results in other contexts to do so with clear instructions.

Additionally, the purpose of this research was to provide a thorough description of the hygiene practices that teachers encountered in their respective schools. Also, I assured transferability by providing a "thick description" of the participant context and the research process, as suggested by Korstjens and Moser (2018). Then, to make the findings relevant to the educational setting in the Island Garden City of Samal, I therefore included specific details about the cultural context, participant selection, and their characteristics. These details also provided insightful information for future researchers studying similar issues in different learning environments.

Dependability. I worked to achieve reliability in data gathering and analysis to guarantee dependability in my qualitative research. Also, I held systematic debriefings right after each interview to verify the results and ensure the quality of the data in real time. Then, I looked for expert validation that the main ideas and themes were accurate to build credibility. Further, to ensure that the results were consistent, I also employed data triangulation,

which involves merging data from various participants. Furthermore, to make it easier for others to follow the procedure and assess the reliability of the results, I also made a research audit trail.

According to Thomas and Magilvy (2011), the transparent documentation of the study process guaranteed dependability as data that remains consistent over time and under various conditions. In the same way, according to Whittemore et al. (2001), crystallization was used by providing comprehensive descriptions to draw emphasis to essential themes. Additionally, ethical standards were upheld because participants had the opportunity to review and verify the transcriptions, which ensured the accuracy of the results of the study.

Confirmability. I set aside my own prejudices and presumptions to prevent influencing the data to guarantee the confirmability of my qualitative study. Also, to correctly record participant responses, I used a mobile phone to record interviews, take down notes, and keep journals throughout the research process. Additionally, I used bracketing and carefully documented every step of the research process to ensure impartiality and openness.

Hence, triangulation, reflexive journaling, and an audit trail further strengthened confirmability by ensuring that interpretations were grounded on actual data (Dyar, 2022; Creswell, 2014). In addition, the study aimed to represent actual viewpoints of the teachers free from researcher bias by focusing on their experiences with classroom hygiene. Thus, the transcripts contained statements that backed up significant findings, and the entire procedure was closely monitored and completed in accordance with accepted research standards.

Role of the Researcher

Qualitative research is complex and frequently involves the researcher balancing many responsibilities. In my dual roles as an investigator and interpreter, I examined the lived experiences, coping mechanisms, and insights of elementary school teachers about hygiene practices in the public schools of Island Garden City of Samal. Hence, reflectivity was key to the relevance of the study since I was aware of any biases or preconceptions that would have concealed insightful analyses of the data pertaining to hygiene practices within the research process. In the same way, rich descriptions of the patterns and key themes found in the responses of the participants were therefore made possible by data analysis.

Also, I presented the results of this thorough research to the larger academic community as a coherent narrative, utilizing qualitative data to highlight the complexities of the context that was still not commonly recognized in the region. Also, along with organizing in-depth interviews with research participants during the study period, I additionally needed to get permission from the adviser, research coordinator, graduate school dean, principal, and school division superintendent at the Island Garden City of Samal. Not only that, I used an interview guide questionnaire to ask the questions to the research participants. By doing this, I obtained permission to record the interviews for transcription purposes and safeguarded the confidentiality of the data. After conducting interviews, I transcribed the responses and asked an expert to analyze the data to identify essential themes that addressed the research questions.

Ethical Considerations

The study was thoroughly reviewed by the University of the Immaculate Conception's (UIC-REC) Research Ethics Committee before it was started to guarantee ethical integrity in my research. I followed all relevant ethical rules during the study, especially when it came to managing the subjects and the data. The following were included, but not restricted to:

Social Value. There is significant societal value in exploring the lived experiences of public elementary school teachers regarding hygiene practices, as it sheds light on significant aspects of public health and education. Understanding the personal experiences of teachers provided deeper insights into the challenges, attitudes, and behaviors associated with hygiene practices in schools. Ensuring access to clean water, proper sanitation, and hygiene education directly contributes to the achievement of the United Nations Sustainable Development Goals (UN SDGs), particularly SDG 3 (Good Health and Well-being) and SDG 6 (Clean Water and Sanitation), which emphasize the need for universal access to safe water and sanitation to reduce health risks.

Further, this study sought to highlight both the strengths and gaps in current practices. Ensuring that schools had

adequate water, sanitation, and hygiene facilities is a fundamental step toward reducing absenteeism, preventing waterborne diseases, and fostering a learning environment where children can thrive (SDG 4: Quality Education). Also, it did not only enhance the health and well-being of educators and learners, but it also fostered a hygienic culture that benefits families and the larger community outside of the school. Schools acted as catalysts for change, where proper hygiene education and sustainable practices can be instilled in young learners, leading to a ripple effect that influences households and communities. This is aligned with SDG 11 (Sustainable Cities and Communities), emphasizing the importance of resilient infrastructure and community-driven initiatives for health and well-being.

Furthermore, the goal of the study is to start a positive feedback loop that improves public health outcomes and access to education for future generations. The societal significance of the study can be leveraged by stakeholders, including government agencies, educational institutions, and non-governmental organizations (NGOs, to drive significant advancements toward a healthier and more sustainable future. Strengthening hygiene initiatives in schools is not just an educational or health priority, but a global responsibility that aligned with the broader vision of sustainable development and equitable access to basic human rights.

Informed Consent. A fundamental component of ethical research is informed permission (Denzin & Lincoln, 2011). It entails giving participants comprehensive information about the study, including its goals, the tasks they were required to do, how the data were used, and any possible effects or results. With that, I informed the participants that their participation is completely optional and that they can decline or withdraw at any time without worrying about the repercussions.

Also, I secured formal consent from the principals and school heads of the selected schools before proceeding with the study with the approval of the school superintendent. The expressed consent to participate in the IDIs and FGDs was requested after they had given their approval. Further, the voluntary participation in the study by the participants was attested by the Informed Consent Form (ICF). The informed consent form was used by the researcher, along with an overview script outlining the goal of the investigation. Additionally, the participants were made aware that this was an optional, private activity, ensuring that their confidentiality and autonomy were upheld throughout the study.

Furthermore, to provide a thorough transcription of the responses of the participants, I recorded the full in-depth interview sessions and focus group discussions using a mobile phone and note-taking as well. Thus, this allowed for accurate and detailed documentation, ensuring that the insights of the participants were properly documented and represented in the study.

Vulnerability of the Participants. The study only accepted voluntary participation, and participant privacy was protected through confidentiality. Participants received thorough information to ensure they understood the study completely before choosing to participate. If unforeseen circumstances prevented them from continuing with the interviews, they had the option to decline their participation and withdraw from the research at any time, without any consequences or pressure. The participants may encounter challenges related to workplace policies, social expectations, or institutional constraints; the study acknowledges their potential vulnerability.

To address this, I took extra precautions to ensure their rights, well-being, and professional security are protected throughout the research process. In addition, the identities of the participants were kept strictly confidential, and all data collected was anonymized to prevent any personally identifiable information from being disclosed. In this research, I prioritized respecting the autonomy and right of the participants to make informed decisions while ensuring that their involvement is entirely voluntary, confidential, and ethically protected throughout the process.

Risks, Benefits, and Safety. The risk could have arisen from physical, psychological, or socio-economic parameters. Physically, participants might have experienced minor fatigue or discomfort during extended discussions. To mitigate this, I ensured that sessions were scheduled at convenient times, provided adequate breaks, and created a comfortable interview environment. Psychologically, participants might have recounted sensitive experiences related to hygiene issues, potentially leading to stress or emotional discomfort. To address this, I fostered a supportive and non-judgmental atmosphere, reminded the participants that they could skip

questions or withdraw at any time, and, if necessary, referred them to support services. Socio-economically, participants feared repercussions in their professional setting for discussing challenges in their schools. To prevent this, all responses were anonymized, and personal identifiers were removed to protect the privacy of the participants.

On one hand, participants might have gained both direct and indirect benefits from their involvement in this study. Direct benefits include raising awareness about hygiene issues within their schools, empowering them with knowledge to advocate for improved facilities, and providing a platform to voice their concerns in a safe, confidential space. On the other hand, indirect benefits might include the potential policy changes, improvements in infrastructure, and better education programs in schools. Also, the insights gained from this research also contributed to long-term improvements in the health and well-being of both teachers and students, fostering a safer and more sustainable learning environment. Besides that, a little token of appreciation was given to the participants for their time and participation.

Privacy and Confidentiality of Information. The data collected for this study was maintained with confidentiality and diligence under legal constraints. Only those directly involved in the study had access to the responses of the participants. Also, the results of the study did not reveal any personally identifiable information when they were published or discussed at conferences. Also, to ensure anonymity, responses were given unique identifiers or pseudonyms, protecting the identities of participants. As this study adhered strictly to the Data Privacy Act of 2012.

Further, all collected data are securely stored for one (1) year after the completion of the study. After this period, the data is permanently disposed of through secure deletion of digital files and proper disposal of any physical records to further ensure the privacy and confidentiality of participants. Furthermore, the UIC Graduate School securely preserved all the data gathered for this study. Additionally, the identities of the participants were never disclosed, and I was the only one with access to their exact answers. Throughout the whole research process, I guaranteed that the responses and information of the participants remained private and confidential.

Justice. I ensured that every participant received equitable treatment throughout the study. Without prejudice or judgment, the selection process, data collection, and analysis were all conducted objectively. Additionally, I ensured that the time constraints for the interviews were properly adhered to out of respect for the time and availability of the participants. Further, fairness and respect were upheld to promote candid and open responses. I made sure to avoid personal bias or influence by not expressing personal thoughts and allowing participants to freely discuss their experiences; this was carefully followed for both IDIs and FGDs.

Furthermore, to ensure that the participants met the standards necessary to obtain accurate and relevant data, specific inclusion criteria were established. The study targeted individuals who met the following conditions: they must be elementary school teachers, have at least three (3) years of teaching experience, and be residents of the Island Garden City of Samal. These criteria served as the basis for the researcher to assess whether participants met the necessary qualifications to provide meaningful insights.

Transparency. To guarantee that participants understood the objectives and methods completely, I remained transparent and truthful throughout the process. In addition, to ensure accessibility of information, key research documents are included in the appendix. Also, I conducted the study professionally, maintaining a commitment to seeking the truth and avoiding bias or prejudgment. Moreover, I committed to honestly reporting data and gathering information with integrity, including acknowledging all sources of data or information used in the study. Specifically, citing authors and sources was strictly followed whenever external information was utilized. To uphold accuracy, participants were given the opportunity to review the transcriptions of their interviews, ensuring that the recorded responses accurately reflect their statements.

More importantly, before publication, the researcher validated the study with participants and provided them with the final research product. Additionally, the researcher acknowledged any potential conflict of interest that might have arisen during the study. To address this, every effort to mitigate bias and ensure that the research findings remained objective and free from external influence was made. To maintain ethical integrity, the researcher fully disclosed any personal, financial, or professional relationships that may have an impact on the

result of the study. By doing so, the study upholds its credibility and transparency, reinforcing ethical research protocols.

Qualification of the Researcher. I was motivated to conduct this study since it aligns with my experience and current role as a faculty member handling students who are in line in the education field. I have the knowledge and experience needed to work with elementary school teachers since I had a degree in elementary education during my undergraduate years. Also, I sought recommendations and guidance from my adviser, expert panelists, and peers to guide me with my research. Additionally, I conducted the study in accordance with the ethical standards established by the Research Ethics Committee of the University of the Immaculate Conception.

Adequacy of Facilities. As a researcher, I ensured that all the necessary facilities for this study were sufficient and accessible. The University of the Immaculate Conception (UIC) provided the graduate students with the convenience of remotely accessing library resources and online materials such as ProQuest, E Library, ERIC, and PH EJournal, all of which have significantly contributed to the completion of this study. Additionally, I have my own internet connection, recorder, laptop, printers, and hard disk drive, as well as other related software for data storage and support, which have been essential for my academic work. Also, I had the honor of consulting with a highly qualified panel of research experts when needed, guaranteeing that the study was carried out with knowledgeable direction and assistance.

Community Involvement. The outcome of the research was designed to make a substantial contribution to the community that will benefit from its results. In the same way, it can serve as a foundation for the development and execution of successful programs, particularly related to hygiene practices in schools, by the education sector and the community and stakeholders. I made sure that the research findings were publicly available to make the information available. By disseminating the experiences of public elementary school teachers, it promotes community engagement and participation in enhancing any hygiene-related issues. As a result, this fosters healthier learning environments for both teachers and students, leading to broader benefits for public health. Through publications, seminars, and presentations, I will interact with community stakeholders to make sure the results of the study are understandable and pertinent. This strategy will encourage cooperation and reinforce alliances with interested parties in the endeavor to improve the school hygiene practices.

RESULTS

Presented in this section are the data interpretation and analysis grounded in the lived experiences, challenges, coping mechanisms, and insights of selected public elementary school teachers on implementing WASH, particularly in hygiene practices.

Profile of the Participants

Shown in Table 1.1 is the profile of the participants who provided responses during the conduct of this study. A total of 17 participants were involved, comprising of 10 individuals who participated in the IDIs and seven who took part in the FGD. All participants were teachers from public elementary schools located in the Island Garden City of Samal, Davao del Norte. Their years of service in the teaching profession ranged from four to 15 years, indicating a diverse level of experience and familiarity with school-based programs such as WASH.

Table 1.1 Profile of the Participants

Participant Code	School	Length of Service
IDIP1	School A	14 years
IDIP2	School B	7 years
IDIP3	School C	10 years
IDIP4	School D	15 years

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IDIP5	School E	13 years
IDIP6	School F	7 years
IDIP7	School G	12 years
IDIP8	School H	7 years
IDIP9	School I	4 years
IDIP10	School I	5 years
FGDP1	School A	6 years
FGDP2	School B	10 years
FGDP3	School C	11 years
FGDP4	School D	11 years
FGDP5	School E	9 years
FGDP6	School F	13 years
FGDP7	School G	15 years

Lived Experiences of the Teachers on the Implementation of WASH Program

Presented in Table 2 are the lived experiences of the elementary teachers in public schools on the implementation of WASH program, specifically in hygiene practices. These are the essential themes generated, establishing daily handwashing routines, engaging children in hygiene practices, teachers facilitating engagement in WASH implementation, reconciling school demands with home realities, navigating constraints of limited resources, and struggling with behavioral and knowledge gaps.

Table 1.2 Lived Experiences of Teachers on the Implementation of WASH Program

Essential Themes	**Core Ideas**
Establishing Daily Handwashing Routines	The children are doing handwashing before entering or before the flag ceremony. The children are doing handwashing before and after eating. The children are doing handwashing after using the comfort room.
Engaging Children in Hygiene Practices	The children use the lavatory to wash their hands. The children enjoy using soap during handwashing. The children play with the faucet and soap.
Teacher Facilitating Engagement in WASH Implementation	The teacher assists the children in handwashing. The teacher assigns a student to lead the handwashing. The teacher monitors the WASH program
Reconciling School Demands with Home Realities	WASH program is not consistently practiced. Some parents are not supportive of the WASH program Proper hygiene is not practiced at home.
Navigating Constraints of Limited Resources	School does not have enough budget for repair of broken faucet. Lack of water

	Water leak School lacks the facility Lack of supply/resources (soap, toothbrush, and toothpaste)
Struggling with Behavioral and Knowledge Gaps	Older children are resistant of the WASH program. Some children do not comply with the handwashing despite several reminders. Some children do not know proper hygiene.

Establishing Daily Handwashing Routines. Public elementary teachers articulated their experiences regarding implementing the WASH program, particularly in hygiene practices. They expressed that children are doing handwashing before entering or before the flag ceremony. Thus, they also shared that before and after eating, students wash their hands. In addition, public elementary teachers shared that after using the comfort room, the children are also doing handwashing. As the participants shared,

Before entering or before the flag ceremony started amoang ginakuan ang mga bata nga mag wash muna ng hands tapos mag brush (IDIP3)

Before entering or before the flag ceremony started, we made the children wash their hands first and then brush*Handwashing sa mga bata before and after sa pagkaon* (IDIP4)Handwashing for children before and after eating *Handwashing before magkaon then kanang after maggamit sa cr kana jud siya, magkaon, mag-snacks.* (IDIP8)Handwashing before eating, and also after using the CR (comfort room), before meals, and before snacks.

After mangihi, manghugas. (IDIP9)

After peeing, wash hands.

*Engaging Children in Hygiene Practices***.** Participants expressed that the children use the lavatory to wash their hands. Hence, children enjoy using soap during handwashing. Lastly, the public elementary teachers also shared that the children play with faucet and soap during handwashing. As told by the participants,

Mag ano jud sila mutuo jud sila sa diha sa kanang diha sa kanang lavatory namo para manghugas og kamot… Nakita nila ay naay kuan labi nato kay hand soap, ana lang pislit-pislit. (IDIP1)

They really go there, they really head straight to our lavatory to wash their hands… They saw that there's something there—especially because there's hand soap, you just press it like this.

Ang mga bata ganahan kaayo maghugas og kamot labi na tong naay bag-ong sabon nga colorful. Magsige og pislit-pislit, murag nagdula. Usahay maghuot pa gani sila sa gripo. (IDIP2)

The children love washing hands, especially with new colorful soap. They keep pressing it like it's a game. Sometimes they even crowd around the faucet.

Nakita nako nga kanang mga bata, inig human og CR, diritso dayon sila sa lababo. Pero usahay magdula-dula pa sa tubig, mag-awas-awas hangtod maabtan og badlong. (IDIP3)

I've noticed that after using the CR, the children go straight to the sink. But sometimes they play with the water, letting it overflow until we scold them.

*Teacher Facilitating Engagement in WASH Implementation***.** The informants facilitate an engaging activity in implementing the WASH program. The public elementary teachers expressed that they assist their children with handwashing. Thus, they also articulated that they assigned a student to lead handwashing as this allowed other children to follow the assigned student. The teachers also shared that they monitor the implementation of the

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WASH program. The following are the responses of the participants,

Tabangan pa nimo sila og kanang ba maghugas og kamot kay mag sawsaw raman gud sila. Need pud sila og supervision. Naa … kanang teacher supervision ba (IDIP1)

You still have to help them, like, with washing their hands because they just tend to dip their hands… They really need supervision. Even those in the higher grades still need teacher supervision.

Akoa jud na silang gina-encourage diba daghan na baya og naga-baon no so akoa ng gina-encourage nga mag-toothbrush since naa ra man sa ilahang bag. (IDIP4)

I really encourage them since many bring baon (packed meals), so I encourage them to toothbrush since it's in their bag.

Sa kindergarten among gibuhat ato para ma-implement namo siya og magamit jud sa bata dapat ang gamit nila naa lang sa sulod then after recess … recess. (IDIP10)

In kindergarten, what we do to implement it is the children's materials should be inside, then after recess they line up at the faucet to toothbrush.

Bug-at gyud siya nga responsibility kay kami mga teachers, dili lang tudlo ang among buhaton. Apil na sad ang pag-monitor sa mga bata kung nag-handwash ba, kung limpyo … proper hygiene. (FGDP1)

It's a heavy responsibility because we teachers don't just teach. We also monitor if children wash hands, if their bodies are clean, and if they practice proper hygiene.

*Reconciling School Demands with Home Realities***.** Despite the strict implementation of the WASH program in school, it is still not being practiced in the students' homes. The informants articulated that WASH program is not consistently practiced. Moreover, they also said that some parents are not supportive of the program. Further, public elementary teachers claimed that proper hygiene is not practiced at home. The participants stated,*Inig abot sa balay di gihapon ifollow ang mga ginatudlo sa maestra, wala gihapon.* (IDIP2)

Even when they get home, they still don’t follow the teacher’s instructions—nothing changes.

Dili man gud siya ma-practice everyday. Kanang ma-remind lang mi pag naa nay report. (IDIP7)It’s not practiced every day. We only get reminded when there’s a report due.*Kanang dili mag-cooperate ang parents. For example mu-ingon ka nga anhi mo diri nga day naa may mga parents nga dili maka-anhi.* (IDIP10)Some parents don’t cooperate. For example, you’ll tell them to come on a specific day, but some just won’t show up.

*Navigating Constraints of Limited Resources***.** Participants experienced several challenges that hinder the effective implementation of the WASH program in schools. Teachers expressed that the school encountered insufficient budget allocation**,** which makes it difficult for schools to repair broken faucets or upgrade damaged water facilities. Thus, they also experienced water scarcity, with some schools experiencing limited or inconsistent water supply, which affected both hygiene practices and daily routines. Furthermore, water leakage due to old or poorly maintained plumbing systems contributed to wastage and further limited water availability. Participants also highlighted the lack of proper hygiene facilities**,** such as handwashing stations or functional restrooms. In addition to infrastructural problems, schools also struggled with a lack of basic hygiene supplies such as soap, toothbrushes, and toothpaste. The informants said,

Lack of supplies. Hurot na dili na ma ano, mangita gani na ang mga bata. Muana, 'Ma’am, wala na tay toothpaste. (IDIP3)

Lack of supplies. Everything's used up and can’t be replenished, the children even start looking for some. They say, 'Ma’am, we don’t have any more toothpaste.

Dinhia naa man hinuon guidance ang division, pero kulang gihapon siya kay 10 man ang required (IDIP1)

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There is actually guidance from the division here, but it's still lacking because the requirement is 10.

Ang problema kay ang mga kinahanglanon para sa hygiene practices dili man available sulod sa eskwelahan. (IDIP9)

The problem is that the necessary items for hygiene practices are not available inside the school.

Wala miy tubig, unya kinahanglan gihapon mag-implement sa handwashing. So among gibuhat, nagpundo mi og tubig sa mga galon. (FGDP2)

We don't have water, yet we still need to implement handwashing. So, what we did was store water in gallons.

Musirit rajud ang tubig, mag-awas awas kay byaan sa mga bata (FGDP7)

The water just bursts out and overflows because the kids leave it running.

*Struggling with Behavioral and Knowledge Gaps***.** The public elementary teachers shared that the older children tend to resist the WASH program**,** showing less interest or willingness to follow hygiene routines. Thus, informants expressed that despite repeated reminders**,** certain students still failed to comply with handwashing practices**.** Additionally, it was noted that some children lack basic knowledge of proper hygiene. The following are the informants' responses:

Ang mga bata dili maminaw maskin usahay nag-sige naka nila og remind. Ang uban manimaho inig ka-udto dili sad kaayo nagahunaw sa ilang kamot. (IDIP4)

The children don't listen even when you constantly remind them. Some smell bad during lunchtime because they don't wash their hands.

Sa lower grades kay okay jud kaayo sila anaon nimo, pero kanang mga higher grade, ah inig palit na nimo diha kaon nana sila diritso. (IDIP2)

The lower grades follow it well, but the higher grades, ah, when you're not looking, they'll eat straight away.

Ang uban bata dili pa jud consistent ang hygiene practices. Kailangan pa og mas daghan awareness ug follow-up sa klase. (FGDP5)

Some children still aren't consistent with hygiene practices. They need more awareness and follow-up in class.

Coping Mechanism of Participants as regards the Implementation of the WASH Program

Shown in Table 2 are the coping mechanisms of the participants as regards the implementation of WASH program particularly in hygiene practices. The themes generated include the following: finding practical organized solutions, optimizing resource use, fostering sustainability in promoting the WASH program, managing resource allocation, and engaging stakeholders.

Table 2 Coping Mechanisms of the Participants as regards the Implementation of WASH Program

Essential Themes	**Core Ideas**
Finding practical organized solutions	Prepare buckets of water. Require students to fall in line during handwashing. Plan the flow of handwashing and brushing activities.
Optimizing Resource Use	Teachers use their own money to buy soap. Teachers practice recycling to save money.

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	Teachers use efficiently the resources. Teachers help each other to clean the area.
Fostering Sustainability in Promoting the WASH Program	Remind the students to practice hand washing at home. Teachers required the students to practice handwashing at home. Integrate proper hygiene in the other subjects.
Managing Resource Allocation	School head provides budget for the water tanks. School head allots budget for the purchase of water pipes. School head allocates budget for the repair and maintenance of the comfort rooms and faucet. School head allocates budget from the canteen fund to support the WASH program.
Engaging Stakeholders	Remind parents about hygiene practices at home during PTA meetings. School nurse visits the school to remind students about proper hygiene. Teachers seek donations from the barangay and other stakeholders

Finding Practical Organize Solutions. The participants shared several practical strategies they implemented to promote hygiene practices among students despite limited resources. Informants stated to prepare a bucket of water as an alternative handwashing solution, especially in areas with limited or no running water. Additionally, teachers required students to fall in line during handwashing**,** which not only promoted orderliness but also encouraged every child to participate in the routine. Lastly, participants also emphasized the importance of planning the flow of handwashing and brushing activities**.** As shared

by the participants,

Naa man miy container, pwede man to kato among gamiton, pakabuon namo ang mga bata (IDIP2)

We have a container that we can use, and we have the children fetch water.

*Gapundo jud mi og tubig diria so among mga CR naay mga laton (*IDIP6)

We really store water here, so our restrooms have water containers

Ginabuhat namo siya by grade level. Maglinya ang mga bata para sa handwashing ug brushing… ang hygiene practices. (IDIP7)

We organize it by grade level. The children line up for handwashing and brushing… We carefully plan the flow so it doesn't get crowded and the hygiene practices are still followed.

*Optimizing Resource Use***.** Public elementary teachers articulated that due to the limited financial support for hygiene-related needs, teachers often resort to using their own money to purchase soap and other basic hygiene supplies**.** They also emphasized the importance of efficient resource management such as recycling to save money and using the resources efficiently**.** Moreover, a strong sense of collaboration was evident, as teachers help one another in cleaning and maintaining hygiene areas**.** These are the few responses of the participants,

Kami gyud mga teachers ang mugasto. Kuot gyud mi sa among bulsa para lang naay magamit ang mga bata. (IDIP3)

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We teachers are really the ones who spend. We dig into our own pockets just so the students have something to use.

Mag-recycle ug magtipid. Usahay amo pa gani gamiton ang among kaugalingong kwarta. (FGDP3)

We recycle and economize. Sometimes, we even end up using our own money.

Aside sa katong despite sa amoang challenge, dapat lang jud complete amoang resources (IDIP1)

Aside from the challenges we face, it's really necessary for us to have complete resources

Inig human pud sa klase, magtinabangay lang mig limpyo bisan kapoy na (FGDP7)

After class, we still help each other clean up even if we're already tired *Fostering Sustainability in Promoting the WASH Program***.** Participants shared that promoting hygiene practices extends beyond the school setting, as they regularly remind students to practice handwashing at home to reinforce healthy habits. Further, public elementary teachers even assign handwashing as a task or homework**,** encouraging students to apply what they have learned in their household routines. Additionally, teachers integrate proper hygiene practices into other subjects, such as using hygiene-related topics in reading, science, or health discussions, making the practice more meaningful and relevant across various learning contexts. The participants said,

Inig ka-udto dili sad kaayo nagahunaw sa ilang kamot pero akoa mana sila ginapa-practice before musulod sa classroom. (IDIP4)At noon, they don't really wash their hands much, but I make sure they practice it before entering the classroom.

Inig muoli nalang sila sa ilang balay, dapat manothbrush jud sila before sila muadto sa eskwelahan. (IDIP6)When they go home, they really should brush their teeth before coming to school.*Naa siyay integration sa ubang subjects like science and MAPEH, sa health pud* (FGDP4)

It's integrated into other subjects like Science and MAPEH, and also in Health.

*Managing Resource Allocation***.** Public elementary teachers expressed that the active support of the school head in sustaining the WASH program through strategic budget allocation for water tanks and piping systems. Furthermore, the participants also shared that the portion of the budget is specifically allocated for the repair and maintenance of comfort rooms and faucets**.** In some cases, the school head also utilizes canteen funds to support WASH-related needs**,** such as purchasing hygiene supplies or improving facilities. The participants shared their responses,

Gigahinan namo og budget mao ng na-improve na siya kay dati tulo lang ka-gripo. (IDIP10)We allocated a budget for it, that's why it improved—before, there were only three faucets.

Nag-allocate mig budget para sa repair og maintenance sa among handwashing. (FGDP2)We allocated a budget for the repair and maintenance of our handwashing facilities.

Ginapangitaan og paagi nga matarong najud ang building. (FGDP6)We're finding ways to properly fix the building.

Regarding pud diay ato sa canteen fund kay diha pud mukuha og fund (FGDP1)Regarding the canteen fund, that's also where we get some of the funding

*Engaging Stakeholders***.** The informants indicated the importance of community and parental involvement in reinforcing hygiene practices beyond the classroom. During PTA meetings**,** they make it a point to remind parents about the importance of maintaining hygiene practices at home**.** Additionally, they also expressed that the school benefits from the involvement of health professionals, as the school nurse regularly visits to educate and remind students about proper hygiene**.** Also, teachers mentioned that they seek assistance from the barangay and ask for donations from stakeholders. The following are the responses of public elementary teachers,

During the PTA meeting, akoa sad na gina-remind ang mga parents… Mubisita man pud ang mga nurse sa school. Ginacheck nila ang mga bata (IDIP4)During the PTA meeting, I also remind the parents… Nurses also visit the school. They check on the children.

Mangayo sad mig tabang usahay sa barangay (IDIP5)Sometimes we also ask for help from the barangay*Of course, donations sa mga stakeholders. Naa miy mga donations nga nadawat* (FGDP7)Of course, there are donations from stakeholders. We've received some donations

Insights Shared by the Participants to the Academe and Community

Displayed in Table 3 are the insights shared by the participants with the academe and community. It revealed common perspectives on the implementation of the WASH program, particularly in hygiene practices. Thus, during the thematic analysis, three essential themes were generated: hygiene plays an important role in supporting student health and learning, community partnership will sustain hygiene practices, and lastly, adequate resources are needed for effective implementation of the WASH program.

Table 3 Insights Shared by the Participants to the Academe and Community

Essential Themes	**Core Ideas**
Hygiene plays an important role in supporting student health and learning.	Proper handwashing diminishes the absences of students. Handwashing is basic but can help much the students. Proper hygiene starts at home.
Community partnership will sustain hygiene practices.	Support of the barangay is needed in the implementation of the WASH program. Proper coordination and communication of the teachers and stakeholders is necessary for the success of the WASH program. Barangay should take part in spreading the importance of hygiene.
Adequate resources are needed for effective implementation of the WASH program	Supply of lavatories and CR are essential for the WASH program. Financial support is needed for the facilities. Manpower is needed in the WASH program.

Hygiene Plays and Important Role in Supporting Student Health and Learning. Participants consistently emphasized the positive impact of proper handwashing on student attendance**.** Although often seen as a basic routine**,** handwashing is described as a simple yet powerful practice that contributes greatly to students' overall health and well-being. Furthermore, public elementary teachers articulated that the foundation of proper hygiene begins at home**,** where children first learn and develop habits that influence their behavior in school. As articulated by the participants,

ma less na ang absences sa bata… dili na kaayo kuan ang mga bata ba kay isa man pud to siya sa kuan nga tinuod jud na ilang gi-ingon no siguro dili na makaana ka sige absent ang bata (IDIP1)

There are fewer student absences now… the children aren't as sickly anymore. That's one of the things they said, and it's true—you won't be saying that the child is always absent.

basic lang siya pero dako kaayo siyag tabang sa atoa. Sa mga bata dako pud siyag impact… ana lang siya ka basic pero dako kaayo siyag impact sa imohang lawas (IDIP2)

It's just basic, but it really helps us a lot. For the children, it has a big impact… it may be simple, but it has a

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huge effect on your body.

hygiene starts at home man jud para dili madala diria sa school (IDIP9)Hygiene really starts at home so that it won't become a problem when they get to school*magsugod jud na sa balay which is ikaw ginikanan* (FGDP7)

It really begins at home, with the parents

ang bata gikan sa balay nga walay hygiene practices, lisod gyud (IDIP3)If a child comes from a home with no hygiene practices, it's really difficult

Community Partnership Will Sustain Hygiene Practices. Public elementary teachers shared the crucial role of barangay support in the successful implementation of the WASH program**.** They shared that local government involvement can provide additional resources and reinforcement. They also reiterated the effectiveness of the program also depends on proper coordination and open communication between teachers and various stakeholders**,** including parents, school administrators, health workers, and barangay officials. Moreover, participants suggested that the barangay should actively participate in promoting the importance of hygiene**,** helping to extend WASH-related advocacy to households and public spaces. As expressed by the public elementary teachers,

Unta support pud sa among barangay since naa man miy mga barangay health workers. (IDIP4)Hopefully, there would also be support from our barangay since we have barangay health workers.

Mangayo sad mig tabang usahay sa barangay (IDIP5)Sometimes we also ask for help from the barangay

Dapat unta naa gyud klaro nga communication ug coordination sa tanan—sa admin, sa mga stakeholders, sa teachers (IDIP5)

There really should be clear communication and coordination among everyone—the admin, stakeholders, and teachers*Unta naay proper nga communication og help sa tanan pati na sa stakeholders* (IDIP8)

Hopefully, there would be proper communication and support from everyone, including stakeholders*Sa community labi na sa barangay kung makadungog sila ani, basin diay kanang pwede sila makapagama ug handwashing facility within the community* (FGDP1)

In the community, especially the barangay, if they hear about this, maybe they could help build a handwashing facility within the community*Kulang jud og awareness... dapat naa jud buhaton ang barangay siguro orientation* (FGDP2)

There's really a lack of awareness… maybe the barangay should conduct an orientation

Adequate Resources is Needed for Effective Implementation of the WASH Program. The informants expressed that the availability of adequate lavatories and comfort rooms is essential for the effective implementation of the WASH program. In addition, they pointed out that financial support is necessary to construct, maintain, and improve facilities. In addition, participants also shared that sufficient manpower to carry out WASH-related tasks, such as maintaining cleanliness, monitoring hygiene practices, and facilitating activities like handwashing and toothbrushing. As shared by the informants,

Unta mag supply og lababo, cr, mao na among kuan jud na unta i-priority ang budget para sa kanang cr per classroom (IDIP6)

Hopefully, we'll be provided with sinks and restrooms. That's really what we want to prioritize in the budget—having a restroom for each classroom

ang problema kay ang mga kinahanglanon para sa hygiene practices dili man available sulod sa eskwelahan (IDIP9)

The problem is that the necessary items for hygiene practices are not available inside the school*We need financial*

support. Bitaw kay kwarta man jud ba labi nag ang facilities ang problema (IDIP7)We need financial support—because honestly, it all comes down to money, especially when the issue is facilities*Gigahinan namo og budget mao ng na-improve na siya kay dati tulo lang ka-gripo* (IDIP10)We allocated a budget for it, that's why it improved—before, there were only three faucets*Kana unta manpower ba kay dili na uso diri, kanya-kanya mi diri* (IDIP7)What we really need is manpower, because that's lacking here—we all just do things on our own*Mas maayo kung naay permanenteng maintenance personnel para sa kasilyas ug palibot* (FGDP6)It would be better if there were permanent maintenance personnel for the restrooms and the surroundings

DISCUSSION

Presented in this section are the discussions and conclusions drawn from the results of the study presented in this chapter. It also includes the implications for educational practice, recommendations for future research, and concluding remarks.

Lived Experiences of Teachers on the Implementation of WASH Program

Based on the transcribed lived experiences of teachers on the implementation of the WASH program, gathered from IDI and FGD, I coded and labeled themes on the challenges and experiences encountered. From the analysis, six key themes emerged: establishing daily handwashing routines, engaging children in hygiene practices, teacher facilitating engagement in WASH implementation, reconciling school demands with home realities, navigating constraints of limited resources, and struggling with behavioral and knowledge gaps.

Establishing Daily Handwashing Routines. Schools teach students to wash their hands at key moments such as before entering the classroom, after using the restroom, and before and after meals, like helping them integrate this practice into their daily lives. In addition to teaching students the importance of cleanliness in the classroom, this practice encourages them to maintain similar habits at home and in their communities.

The emerging theme is in parallel with the findings of Irehovbude and Okoye (2020) and Younie et al. (2020), which emphasized that effective education strategies are key to raising awareness, changing behaviors, and encouraging regular handwashing. As schools increase the availability of hand hygiene supplies, such as soap and water, they further facilitate the practice of good handwashing habits. Also, this finding supports the study of Pulimeno et al. (2020) that effective health education, schools must provide adequate handwashing facilities. As emphasized by Berhanu et al. (2022), schools play a critical role in fostering proper hygiene habits among students, and with the right resources, they can effectively promote cleanliness, leading to lasting health benefits.

Engaging Children in Hygiene Practices. Encouraging students to actively participate in activities like handwashing is a key component of engaging them in hygiene practices. Teachers assist by including these enjoyable activities in the regular schedule. With the help of this method, kids can develop a habit of maintaining their hygiene at home and at school.

This finding aligns with the study of Osman et al. (2021), who found that mobile learning apps could be effectively employed to teach hygiene habits in more engaging ways, such as through pictures and video clips of personal hygiene care. The theme that emerged is in parallel with Berhanu et al. (2022), emphasizing the role of engagement and interaction in reinforcing hygiene habits, both in school and at home. Notably, Okoye's (2020) findings suggest that when children find hygiene practices enjoyable and are supported by both school-based initiatives and home reinforcement, these habits become ingrained and are more likely to be maintained long-term.

Teacher Facilitating Engagement in WASH Implementation. Educating students about proper hygiene practices, including washing their hands, and incorporating them into their daily routines, are the main goals of teacher-facilitated participation in the WASH program. Teachers mentor students by designating leaders to serve as role models for good hygiene, which promotes peer participation. Teachers make sure pupils develop these behaviors at home and at school by constantly observing the program. Better participation and a longer-lasting effect on students' well-being result from this active involvement in fostering a supportive environment where hygiene and health are valued.

This agrees with the study of Tamiru et al. (2017), who found that a teacher-led approach significantly improved personal hygiene practices and knowledge among school adolescents. Also, the theme aligns with the study of Uddin (2024), which highlighted the effectiveness of interactive hygiene education sessions led by teachers and community nurses in schools. Collectively, Reyes et al. (2023) underscore the importance of active teacher involvement and collaborative efforts in promoting and sustaining hygiene practices within schools.

Reconciling School Demands with Home Realities. It entails establishing a connection between the cleanliness habits that are taught in schools and those that are maintained at home. Although the WASH program is implemented in schools to promote good hygiene, children frequently find it difficult to incorporate these practices into their daily routines at home. The program's efficacy outside of school hours is limited when parents are not properly informed about it or actively involved in it. Stronger cooperation between families and schools is required to address this and make sure that hygiene education is implemented in the home as well as in the classroom. The objective is to establish a regular hygiene regimen for students that lasts throughout their everyday lives by encouraging collaboration between the home and the school.

This aligns with the findings of UNICEF (2021), which noted that while hand hygiene is critical, approximately 2.3 billion people lack access to clean water and soap at home. The study further revealed that many mothers face challenges in ensuring consistent hygiene practices, such as brushing their children's teeth, often due to factors like illness or fatigue. The resulting theme supports the study by Finlayson et al. (2019), who identified child-level, family-level, and community-level factors that influence hygiene behaviors, including a child's developmental stage, family role models, and the mother's knowledge and attitudes about oral health. Also, Tamiru et al. (2017) reinforced the idea that effective hygiene education requires not only school-based efforts but also active involvement and support from families and communities.

Navigating Constraints of Limited Resources. It involves addressing the difficulties that schools encounter because of limited facilities and resources. The general operation of the WASH program is impacted because schools frequently suffer from tight funds that prohibit the repair or maintenance of basic amenities like water systems, bathrooms, and faucets. The implementation of appropriate hygiene measures is made more difficult by the fact that many schools experience water scarcity due to an unstable or uneven water supply. These limitations emphasize the necessity of consistent funding and dependable resources to guarantee the effectiveness of school cleanliness initiatives.

This aligns with the study of Nwajiuba et al. (2019), who found that a lack of equipment and facilities prevents students from applying their handwashing knowledge, leading to poor hygiene practices. In addition, this supports the findings of Oleribe et al. (2019), who identified limited resources and poor leadership as major barriers to improving health systems. Further, Chittleborough et al. (2012) and Ezezika et al. (2023) emphasized that factors like water scarcity, lack of time, and unattractive facilities make it difficult to maintain consistent handwashing behaviors. Similarly, UNICEF (2021) and Bishoge (2021) noted that inadequate hand hygiene facilities in schools and healthcare settings impede the success of hygiene programs.

Struggling with Behavioral and Knowledge Gaps. Older students often resist following hygiene routines, showing little interest in practices like handwashing despite repeated reminders. Additionally, some students lack basic knowledge of proper hygiene, further hindering their adherence to good practices. This highlights the need for ongoing, age-appropriate education to address these gaps and encourage better hygiene habits both at school and at home.

The emerged theme is in parallel with the findings of De Leon and Reyes (2022), who emphasized the importance of continuous and age-appropriate hygiene education to address such gaps. This finding supports the study by Villanueva (2021), who noted that without ongoing education and engagement, students are less likely to internalize hygiene habits. Further, Santos (2021) accentuated that addressing the gaps in both knowledge and behavior may require more targeted age-appropriate strategies that cater to the developmental needs of older students.

Coping Mechanisms of the Participants as regards the Implementation of the WASH Program

I categorized and labeled themes on coping mechanisms for the challenges encountered by the participants in

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implementing the WASH program based on the transcribed IDI and FGD. I came up with the following themes: finding practical, organized solutions, optimizing resource use, fostering sustainability in promoting the WASH program, managing resource allocation, and engaging stakeholders.

Finding Practical Organized Solutions. It is essential for encouraging students to practice good hygiene, particularly in underfunded schools. Teachers made sure that hygiene procedures could still be carried out successfully by putting into practice useful tactics like setting up alternate handwashing stations and arranging children in neat lines. Despite their simplicity, these ideas have a big influence on student health and participation. These workable alternatives enhance not only cleanliness but also attendance and general well-being, much like hygiene is essential for promoting student health and learning.

This aligns with the study of Martinez and Navarro (2018), who emphasized that queueing for handwashing not only promotes cleanliness but also fosters essential social skills and responsibility among students. In addition, this finding supports the study of Simons and Abrera (2020), who stated that structured routines enhance students' sense of safety and support while performing hygiene activities. On this note, Cruz and Belmonte (2019) opined that consistent scheduling is key to developing habitual hygiene behaviors in children.

Further, this also supports the study of Santos and Javier (2020), who identified visual cues as effective cognitive scaffolds for establishing hygiene routines. Similarly, Okabe and Trujillo (2018) promote the use of marked environmental features, such as buckets, signage, and hygiene stations, to enhance student autonomy and compliance with hygiene practices. Interestingly, some schools also introduced rotational roles, appointing "Hygiene Monitors" among students to oversee line-ups and monitor brushing techniques and resource use.

Optimizing Resource Use. Teachers frequently buy necessary hygiene supplies like soap and cleaning agents on their own in underfunded schools. They also stress the significance of making prudent use of the resources at hand, including recycling, and making sure nothing is wasted. This illustrates the ingenuity and cooperation of teachers, who support one another in keeping the school's areas tidy and sanitary. Maintaining cleanliness practices in these public schools requires effective resource use, particularly in situations where institutional support is inadequate.

This aligns with the study of Marquez and Beltran (2019), who noted that personal sacrifice is common among public school educators in the Philippines, as they often compensate for institutional gaps by using their own resources. This is in parallel with the study of Villanueva and Paraiso (2020), who assert that managing resources in underfunded schools requires flexibility, creativity, and initiative, qualities demonstrated by the teachers in this study. Further, Dela Cruz and Alano (2022) highlighted micro-budget management, a strategy where teachers maximize the use of existing materials to maintain hygiene standards without overextending resources. Similarly, Navarro and Ledesma (2021) contend that while these personal contributions are admirable, they raise concerns about sustainability and equity in the long term.

*Fostering Sustainability in Promoting the WASH Program***.** Promoting sustainable hygiene practices necessitates encouraging students to use what they have learned at home, taking the practice outside of the classroom. To encourage students to integrate cleanliness into their everyday routines, some teachers give homework assignments that involve handwashing. In order to help students understand the connection between proper hygiene and many academic disciplines, hygiene concepts are also incorporated into subjects like science, literature, and health.

This is aligned with the study of Ramos and Villanueva (2021), which highlights that the sustainability of hygiene education depends on reinforcing behaviors both at school and at home. Teachers help create strong home-school links to ensure the continuity of hygiene habits. This aligns with the study of Alvarez and Santos (2021), who argued that teaching hygiene as part of subjects like science or values education helps students see its relevance beyond health class. In addition, Mendoza and Dizon (2019) asserted that cross-curricular teaching increases students' retention and application of health concepts, and sustainability is reinforced by hygiene habits practiced at home.

*Managing Resource Allocation***.** To maintain the WASH program, school administrators must allocate resources

effectively. In addition to using canteen earnings to pay for hygiene-related costs like soap and small plumbing repairs, this entails carefully allocating funds for necessary infrastructure like water tanks and restrooms. Despite limited resources, these procedures guarantee that hygienic requirements are continuously upheld.

This aligns with the study of Navarro and de Villa (2021), who argue that school leadership that prioritizes health and sanitation through allocated budgets helps meet the overall school environment's needs. Also, this agrees with the work of Salvador and Banzon (2020), who suggest that engaged school leadership, particularly in maintaining hygiene resources, positively impacts the health and psychosocial well-being of younger students. Additionally, Salazar and Domingo (2021) found that ongoing funding for hygiene facilities fosters trust in school leadership and promotes collaborative health governance.

Engaging Stakeholders. Engaging stakeholders involves actively involving parents, community members, and external partners in promoting and sustaining hygiene practices. Teachers frequently remind parents of their role in reinforcing hygiene habits at home and seek support from local health professionals and community organizations. This collaboration helps ensure a consistent approach to hygiene education, both at school and at home, fostering a sense of shared responsibility for students' well-being.

This agrees with the study of Garcia and Benitez (2021), who concluded that regular communication with parents helps raise awareness and fosters accountability, reinforcing students' hygiene habits both at home and in school. Likewise, the finding conforms with the study by Lim and Cruz (2022) found that increased stakeholder involvement fosters a stronger sense of accountability for students' health and well-being. This is consistent with Alvarez and Uy (2023), who found that when schools and their communities collaborated, student hygiene compliance improved, leading to reduced absenteeism and better health outcomes.

Insights Shared by the Participants to the Academe and Community

I classified and grouped themes on insights shared with the academe and community from the transcribed IDI and FGD. I came up with the following themes: hygiene plays an important role in supporting student health and learning, community partnership will sustain hygiene practices, and adequate resources are needed for effective implementation of the WASH program.

*Hygiene Plays an Important Role in Supporting Student Health and Learning***.** The academic performance and general health of students are greatly enhanced by consistent handwashing and appropriate hygiene practices. This simple but efficient method improves attendance at school and overall well-being.

The finding agrees with the study of Kabir et al. (2019), which revealed that students were aware of the importance of handwashing and possessed positive attitudes towards maintaining good hygiene practices despite structural barriers. These positive attitudes may be linked to WASH-related understanding gained at a pre-university age. In addition, the result corroborates with the study of Chakraborty and Ray (2024) who claimed that school hygiene is a crucial practice in educational settings, involving personal hygiene practices, environmental factors, and regular cleaning to ensure the health and well-being of students and staff. Thus, Khamaiseh and Leimoon (2024) further explained that positive attitude towards school hygiene depends on increasing knowledge among students. It has suggested educational interventions, awareness campaigns, and collaboration among schools, parents, and authorities to promote cleanliness and health consciousness.

*Community Partnership Will Sustain Hygiene Practices***.** Collaboration between schools and the surrounding communities is essential for the WASH program to be implemented effectively. For the program to be successful, barangay support is essential. Further, appropriate cooperation between parents, school administrators, health professionals, and barangay officials enhances program delivery, and the participation of local government units supplies crucial resources.

This finding supports the study of Nelson et al. (2021), which demonstrated how community participation directly impacts WASH sustainability through improved resource availability and lasting behavioral changes. The theme that emerged is in parallel with the study of Adams and Boateng (2018), confirming that knowledge-sharing among community members is fundamental to addressing WASH challenges. However, Bowling and

Hall (2019) caution that current SDG indicators promote a top-down approach to community participation. Their work suggests the need for clearer frameworks to establish robust qualitative and quantitative measures of community engagement.

Adequate Resources are Needed for the Effective Implementation of The WASH Program. A key component of implementing WASH programs in schools successfully is making sure there are enough resources available. For hygiene programs to be effective, there must be operational facilities, steady financing, and sufficient staff to keep the area clean and encourage students to practice good hygiene. The research clearly indicates that functional sanitation facilities, consistent funding, and sufficient staff are critical for WASH programs.

These findings support the study by Kanyangarara et al. (2021), highlighting the crucial role that accessible water and sanitation facilities play in promoting health and hygiene in schools. It emphasizes that without functional sanitation services, students are less likely to practice good hygiene, which can lead to increased absenteeism and health issues.

Also, the emerged theme conforms with the study of Rahman et al. (2020), which underscores the necessity of reliable funding and operational facilities for the successful implementation of hygiene programs. The findings demonstrate that schools with consistent financial backing and maintenance staff are more effective in promoting hygiene practices among students, ultimately improving health outcomes. As highlighted by Mason (2018) in his review that sufficient resources, including functional facilities, trained personnel, and steady funding, are critical for the success of WASH programs in schools.

Notably, the Integrated Behavioral Model for Water, Sanitation, and Hygiene (IBM-WASH) and Integrated Water Resources Management (IWRM) provide a framework for understanding the multifaceted challenges faced by teachers in implementing WASH programs in educational settings. Also, Dreibelbis (2013) emphasizes that these models highlight the interplay between individual behaviors, institutional support, and community engagement in promoting effective hygiene practices.

On this note, the findings of the study reveal that teachers are not only responsible for establishing daily handwashing routines and serving as hygiene role models but also for bridging gaps between school and home hygiene practices. However, they encounter significant challenges, such as limited resources, broken facilities, and water scarcity, which hinder their effectiveness. By applying the IBM-WASH model, it was seen how these challenges impact teachers' ability to influence student behavior and promote good hygiene practices.

In response to these challenges, teachers have developed pragmatic coping mechanisms that align with the principles of IWRM, emphasizing the need for collaborative, community-based solutions. Utilizing personal funds, maximizing scarce resources, and engaging with community members and local stakeholders allow teachers to create innovative systems that address both behavioral and logistical issues.

The insights gained from their experiences underline the critical importance of community support and the necessity for stronger backing from the Department of Education (DepEd). Ultimately, the integration of IBM-WASH and IWRM provides a comprehensive understanding of how systemic collaboration and shared responsibility can enhance the implementation of WASH programs, transforming hygiene promotion into a collective mission that significantly benefits student well-being and contributes to overall school improvement.

Implications for Educational Practice

The experience expressed by the public elementary teachers highlighted the significant role of teachers in embedding hygiene practices into the daily routines of schools. The Department of Education (DepEd) must prioritize providing teachers with comprehensive training on WASH implementation strategies, including effective techniques for engaging young learners in hygiene-related activities. It showed that young learners are playful, and they really wanted something to play with while performing the WASH, especially in the context of this inquiry. Further, strengthening teachers' competencies in facilitating hygiene education will not only improve students' health outcomes but will also foster habits that contribute to better attendance and academic performance.

In addition, schools create a supportive learning environment equipped with adequate hygiene facilities and materials. This includes the provision of handwashing stations, clean toilets, soap, and clean water. Educational leaders and policymakers must prioritize budget allocations and partnerships with external stakeholders to sustain WASH resources. Without consistent access to facilities, even the most motivated teachers and students will find it difficult to maintain proper hygiene behaviors. Thus, collaboration with families and the larger community must also be reinforced. Schools should organize programs that extend hygiene education to parents and guardians, ensuring that practices taught at school are reinforced at home. Building strong community-school partnerships will sustain hygiene efforts beyond the classroom and foster a shared responsibility for student health and well-being.

Further, teachers' coping mechanisms underscore that resourcefulness, innovation, and collaboration must be central to the school concerning hygiene promotion. Teachers demonstrated resilience by finding practical and organized solutions when faced with limited supplies and infrastructure. Sharing best practices among schools through teacher forums, conferences, and workshops could also equip educators with a wider repertoire of strategies for overcoming resource constraints. For instance, assigning hygiene ambassadors among students, repurposing available materials for hygiene education activities, and creating community drives to collect hygiene supplies can all be incorporated into school practice.

Furthermore, fostering sustainability requires schools to integrate hygiene practices into broader strategic plans, rather than viewing them as stand-alone projects tied to external funding cycles. Schools must design hygiene programs with long-term viability in mind, seeking diverse partnerships with local health offices, NGOs, businesses, and community organizations. Managing resource allocation must therefore become a key administrative competency, ensuring that WASH-related expenses are included in school budgets, and that responsibility for hygiene promotion is distributed across various sectors of the school, not just resting on a few individuals.

The insights of public elementary teachers that community partnership is vital for sustaining hygiene practices demands a rethinking of school-community relationships. Schools must build enduring, structured partnerships with community organizations, local governments, healthcare providers, and parent groups. Regular community involvement in hygiene education activities, such as community-led hygiene campaigns, school health fairs, and family workshops, should be institutionalized as part of school programming. Moreover, the acknowledgement that adequate resources are crucial for effective WASH implementation necessitates strong advocacy by school leaders. Policymakers must recognize that funding for hygiene facilities, supplies, and training is an investment in educational quality. Teachers should be empowered to voice their needs and participate in school budgeting processes to ensure that hygiene programs are adequately supported. Without sufficient materials and infrastructure, it highlights the need for systemic support.

Recommendations for Future Research

The following recommendations are suggested based on the results of the study. Integrating the themes regarding the experiences of the public elementary teachers on the implementation of the WASH program, particularly the hygiene practices in their schools. Future researchers may expand the scope of participants beyond public elementary school teachers to include students, parents, and community health workers. In this way, researchers may develop a holistic understanding of how hygiene practices are formed, challenged, and sustained across different social contexts.

It is also recommended that future studies employ a longitudinal research design to examine the long-term impacts of hygiene education and WASH program implementation on student health, academic achievement, and behavioral change. Hence, future researchers may also consider identifying the gap between the implementation of the WASH program in schools and at home. This will provide substantive data to our policymakers to integrate the WASH program in their home with the participation of their local communities or NGOs.

Consequently, future researchers may consider using quantitative studies or other methods, such as descriptive correlational, mixed-method, or action research methods that actively involve teachers, students, and community

members as co-researchers. This approach can lead to more practical solutions and stronger program ownership among stakeholders. Through this method, interventions can be continuously refined based on real-time feedback, making them more relevant, sustainable, and impactful in promoting hygiene practices among school-aged children

Concluding Remarks

As I worked on this study, I discovered many important realities regarding the implementation of the WASH program, particularly on hygiene practices in public elementary schools. I was quite shocked to realize that teachers, despite their best efforts, often cannot fully implement the program as expected due to various persistent challenges. One major issue is the lack of basic facilities, such as proper handwashing stations, a consistent water supply, or even simple necessities like soap. Also, I learned that many schools operate with very limited budgets, and there is often little to no funding specifically allocated to support WASH initiatives.

As a college teacher, I find it difficult to imagine having to use my own personal resources just to properly implement a program that should be institutionally supported. It is truly disheartening to realize that while the goals of WASH are critical for student health and education, the burden often falls heavily on the shoulders of teachers who are already managing numerous responsibilities. Nevertheless, this is the reality faced by many educators, and it is a situation that deserves more attention, support, and sustainable solutions from both educational leaders and policymakers. Personally, the challenges encountered by public elementary school teachers in the implementation of the WASH program serve as a powerful eye-opener for the Department of Education. It highlights the urgent need for sufficient budget allocation not only for WASH but for any program or activity they intend to implement in schools. Without the necessary financial support, even the most well-intentioned initiatives risk failing to achieve their goals.

Further, beyond addressing the budget issue, teachers also play a vital role in making hygiene practices more engaging and enjoyable for young learners. By incorporating fun activities, such as songs, storytelling, or interactive games, teachers can foster positive hygiene habits among students while maintaining their interest and participation. Most importantly, public elementary school teachers must be consistently mindful of modeling proper hygiene practices themselves. Furthermore, young learners are natural imitators, and when they see their teachers who are practicing handwashing and other hygienic behaviors sincerely and regularly, they are more likely to adopt these habits in their own lives. In this way, teachers not only educate but also serve as daily role models for healthy behavior, creating a more sustainable and meaningful impact on students' lives.

As the researcher, I gained a deeper understanding of the experiences and challenges faced by public elementary school teachers. Through this study, I was able to see firsthand how the implementation of the WASH program has caused teachers to struggle in various ways, often beyond their control. Despite the lack of resources, limited facilities, and other constraints, these teachers showed remarkable resilience and dedication. They found ways to manage and address the difficulties they encountered, using their creativity and personal initiative to sustain the program as best as they could. This experience allowed me to appreciate the perseverance and commitment of the teachers who work tirelessly to promote hygiene practices among their learners, even when the support they need is not always fully available.

REFERENCES

1. Adams, E. A. & Boateng, G. O. 2018 Are urban informal communities capable of co-production? The influence of community–public partnerships on water access in Lilongwe, Malawi. Environment and Urbanization 30 (2), 461–480.
2. Aduro, A. & Ebenso, B. 2019 Qualitative exploration of local knowledge, attitudes and use of Moringa oleifera seeds for home-based water purification and diarrhoea prevention in Niger State, Nigeria. Journal of Water, Sanitation and Hygiene for Development 9 (2), 300–308.
3. Ahmed, J., Wong, L. P., Chua, Y. P., Hydrie, M. Z. I., & Channa, N. (2021). Drinking water, sanitation, and hygiene (WASH) situation in primary schools of Pakistan: the impact of WASH-related interventions and policy on children school performance. Environmental Science and Pollution Research, 29(1), 1259–1277. https://doi.org/10.1007/s11356-021-15681-w

4. Aiello, A. E., & Larson, E. L. (2002). What is the evidence for a causal link between hygiene and infections? The Lancet Infectious Diseases, 2(2), 103–110.
5. Alawi, K., & Domingo, M. (2021). Structured School Hygiene Programs and Absenteeism Reduction. Journal of Health Education Practice, 14(3), 145–159.
6. Alvarez, C., & Santos, M. (2021). Cross-Disciplinary Strategies in Health Education. Journal of Holistic Pedagogy, 18(2), 112–125.
7. Alvarez, T., & Uy, M. (2023). Collaborative Stakeholder Engagement in Public School Health Programs. Journal of Rural Education & Development, 15(3), 112–126.
8. Appiah, B., Poudyal, A., Anum, D., Appiah, G., Wesuta, A. C., Akodwaa-Boadi, K., Ogodo, O., Nakkazi, E., Mulogo, E. M. & Odai, S. N. 2020 Challenges and facilitators of public engagement with water, sanitation, hygiene and other environmental health issues in Ghana and Uganda: perspectives of scientists, journalists and the public. Journal of Water, Sanitation and Hygiene for Development 10 (1), 16–26.
9. Arimoro, A. E. & Musa, H. 2020 Towards sustainable water resource management in rural Nigeria: the role of communities. Journal of Sustainable Development Law and Policy (The) 11 (1), 1–17.
10. Bautista, A. & Ong, K. (2019). Collaborative School Cultures in the Philippines: Strengthening Educator Networks. Manila: Southeast Asia Education Review.
11. Bautista, A., & Tan, J. (2021). Public-Private Partnerships in Promoting School Hygiene. Southeast Asia Health Journal, 8(1), 77–88.
12. Berhanu, A., Mengistu, D. A., Temesgen, L. M., Mulat, S., Dirirsa, G., Alemu, F. K., Mangasha, A. E., Gobena, T. & Geremew, A. (2022). Hand washing practice among public primary school children and associated factors in Harar town, eastern Ethiopia: An institution-based cross-sectional study. Frontiers in Public Health, 2022, 1–11.
13. Bishoge, O. K. (2021). Challenges facing sustainable water supply, sanitation and hygiene achievement in urban areas in sub-Saharan Africa. Local Environment, 26(7), 893–907. https://doi.org/10.1080/13549839.2021.1931074
14. Bisung, E., Elliott, S. J., Abudho, B., Schuster-Wallace, C. J., & Karanja, D. M. S. (2015). Dreaming of toilets: Using photovoice to explore knowledge, attitudes and practices around water–health linkages in rural Kenya. Health & Place, 31, 208–215. https://doi.org/10.1016/j.healthplace.2014.12.007
15. Bloomfield, S. F., & Nath, K. J. (2009). The use of hygiene procedures for the prevention of diarrhea and respiratory infections in the home and community settings. American Journal of Infection Control, 37(6), 501–508.
16. Bowling, T. & Hall, N. 2019 Improving rural public health through 'best practice' water, sanitation and hygiene initiatives. Health 23 (2), 197–214.
17. Bryman, A., & Bell, E. (2007). Business Research Methods (2nd ed.). Oxford University Press.
18. Budiu, R. (2021, July 11). Why 5 participants are okay in a qualitative study, but not in a quantitative one. Nielsen Norman Group. https://www.nngroup.com/articles/5-test-users-qual-quant/
19. Carpio, L. & De Los Reyes, M. (2022). Sustainable Budgeting for Health Programs in Philippine Public Schools. Journal of School Administration Studies, 11(2), 45–58.
20. Carreon, V., & Pineda, R. (2020). Family Influences on Child Hygiene Habits. Philippine Journal of Behavioral Health, 12(1), 44–57.
21. CDC. (2023). Hand Hygiene in School and Early Care and Education. https://www.cdc.gov/handwashing/handwashing-school.html
22. Centers for Disease Control and Prevention. (2021). Cleaning and disinfecting your facility. Retrieved July 13, 2024, from https://www.cdc.gov/coronavirus/2019-ncov/community/disinfecting-building-facility.html
23. Chakraborty, B., & Ray, S. (2024). Students' knowledge and attitude towards school hygiene: A micro study in Murshidabad district. World Journal of Advanced Research and Reviews, 23(1), 1161-1168.
24. Charmaz, K. (1990). 'Discovering' chronic illness: Using grounded theory. Social Science and Medicine, 30, 1161–1172.
25. Chittleborough, C. R., Nicholson, A. L., Basker, E., Bell, S. & Campbell, R. (2012). Factors

influencing hand washing behaviours in primary schools: Process evaluation within a randomized controlled trial. Health Education Research, 27(6), 1055–1068. https://doi.org/10.1093/her/cys061
26. Cortez, J., & Fujimoto, N. (2019). Micro-Roles and Macro-Impact: Hygiene Leadership in Classrooms. International Review of School Leadership, 8(2), 95–108.
27. Crocker, J., Shields, K. F., Venkataramanan, V., Saywell, D. & Bartram, J. 2016 Building capacity for water, sanitation, and hygiene programming: training evaluation theory applied to CLTS management training in Kenya. Social Science & Medicine 166, 66–76
28. Cruz, M. A., & Alberto, J. R. (2022). Institutional Capacity and Sanitation Practices in Philippine Public Schools. Southeast Asian Journal of Health and Development, 8(2), 109-124.
29. Cruz, R., & Belmonte, C. (2019). Habitual Hygiene: Integrating Health in Elementary School Routines. Philippine Journal of Child Development, 11(4), 203–218.
30. Curtis, V., & Cairncross, S. (2003). Effect of washing hands with soap on diarrhea risk in the community: A systematic review. The Lancet Infectious Diseases, 3(5), 275–281.
31. Dajaan, D. S., Addo, H. O., Ojo, L., Amegah, K. E., Fiagbe, L., Bechala, B. D. & Benjamin, B. B. (2018). Hand washing knowledge and practices among public primary schools in the Kintampo Municipality of Ghana. International Journal of Community Medicine and Public Health, 5(6), 2205–2216. https://doi.org/10.18203/2394-6040.ijcmph20182146
32. De Leon, I., & Reyes, C. (2022). The Role of School Nurses in Student Hygiene and Health Promotion. Philippine Journal of Child Health, 9(2), 53–67.
33. De Vera, J., & Gutierrez, M. (2021). Habit Formation in Early Childhood Hygiene Education. International Review of Educational Psychology, 23(4), 233–248.
34. De Vries, A., & Mercado, L. (2019). Water Storage as a Solution for Hygiene in Low-Resource Schools. Asian Journal of Public Health, 12(1), 55–67.
35. Dela Cruz, R. & Alano, M. (2022). Micro-budgeting in Low-Resource Public Schools: Practices and Challenges. Journal of Educational Management and Innovation, 11(2), 45–57.
36. Delos Reyes, T., & Briones, P. L. (2020). Community-Driven Approaches to School Sanitation: Lessons from Rural Philippines. Journal of Educational Development, 5(1), 57-68.
37. Delos Santos, I., & Ramirez, M. (2019). Building Sustainable WASH Programs through Community Engagement. Philippine Journal of Public Health, 25(2), 89–102.
38. Dominguez, T. & Peña, H. (2020). Grassroots Approaches to Health Promotion in Public Elementary Schools. Philippine Journal of Social Research, 8(1), 22–36.
39. Dreibelbis, R., Greene, L. E., Freeman, M. C., Saboori, S., Chase, R. P., & Rheingans, R. (2013). Water, sanitation, and primary school attendance: A multi-level assessment of determinants of household-reported absenteeism in Kenya. International Journal of Educational Development, 33(5), 457–465.
40. Dreibelbis, R., Winch, P. et al. (2013). The Integrated Behavioural Model for WASH: A Systematic Review of Behavioural Models and a Framework for Designing and Evaluating Behaviour Change Interventions in Infrastructure-Restricted Settings. BMC Public Health, 13, 1015.
41. Ellis, A., Haver, J., Villasenor, J. M., Parawan, A., Venkatesh, M., Freeman, M. C., & Caruso, B. A. (2016). WASH challenges to girls' menstrual hygiene management in Metro Manila, Masbate, and South-Central Mindanao, Philippines. Waterlines, 35(3), 306–323. https://doi.org/10.3362/1756-3488.2016.022
42. Elo, S., Kääriäinen, M., Kanste, O., Pölkki, T., Utriainen, K., & Kyngäs, H. (2014). Qualitative content analysis. SAGE Open, 4(1), 215824401452263. https://doi.org/10.1177/2158244014522633
43. Espina, C. G., & Quijano, R. S. (2021). Hygiene Infrastructure and the Learning Environment in Elementary Schools. Philippine Journal of School Health, 12(3), 203-217.
44. Esquivel, L. R., & Navarro, P. J. (2020). Barangay Leadership and Public Health Advocacy: A Grassroots Perspective. Southeast Asian Health Review, 17(3), 45–59.
45. Ezezika, O., Heng, J., Fatima, K., Mohamed, A. & Barrett, K. (2023). What are the barriers and facilitators to community handwashing with water and soap? A systematic review. PLoS Global Public Health, 3(4), e0001720. https://doi.org/10.1371/journal.pgph.0001720
46. Francis, J. J., Johnston, M., Robertson, C., Glidewell, L., Entwistle, V., Eccles, M. P., & Grimshaw, J. M. (2010). What is an adequate sample size? Operationalising data saturation for theory-based

interview studies. Psychology & Health, 25(10), 1229–1245. https://doi.org/10.1080/08870440903194015
47. Fernandez, H., & Yulo, J. (2022). Planning Health Activities in Schools: A Behavioral Approach. Health Systems and Education, 10(2), 89–102.
48. Ferrer, L., & Castillo, J. (2022). Long-Term Impacts of Routine-Based Hygiene Education. Southeast Asian Education Review, 15(3), 98–111.
49. Finlayson, T. L., Cabudol, M., Liu, J. X., Garza, J. R., Gansky, S. A., & Ramos-Gomez, F. (2019). A qualitative study of the multi-level influences on oral hygiene practices for young children in an Early Head Start program. BMC Oral Health, 19, 1-14.
50. Fraenkel, J., Wallen, N., & Hyun, H. (2023). How To Design and Evaluate Research in Education (11th ed.). McGraw-Hill Education.
51. Francisco, L. D., & Dizon, H. M. (2023). Collaborative Resource Mobilization for WASH Programs in Public Schools. Journal of Local Governance and Education, 7(1), 88-101.
52. Freeman, M. C., Stocks, M. E., Cumming, O., Jeandron, A., Higgins, J. P. T., Wolf, J., ... & Curtis, V. (2014). Hygiene and health: Systematic review of handwashing practices worldwide and update of health effects. Tropical Medicine & International Health, 19(8), 906–916.
53. Garcia, N., & Benitez, R. (2021). Home-School Collaboration in Elementary Student Hygiene. International Journal of Early Childhood Care, 12(4), 101–113.
54. Gatchalian, E. & Feliciano, D. (2021). Health Infrastructure and Student Attendance: A Study of Rural Schools. Education & Society Review, 16(3), 18–32.
55. Gatchalian, R. M., & Torres, A. L. (2022). Collective Accountability in School Hygiene Programs. Journal of Local Governance and Education, 9(1), 33–48.
56. Girmay, A. M., Weldegebriel, M. G., Mengesha, S. D., Serte, M. G., Weldetinsae, A., Alemu, Z. A., Dinssa, D. A., Wagari, B., Alemayehu, T. A., Kenea, M. A., Teklu, K. T., Gobena, W., Fikresilassie, G., Adugna, E. A., Tessema, M., & Tollera, G. (2023). Factors influencing access to basic water, sanitation, and hygiene (WASH) services in schools of Bishoftu Town, Ethiopia: a cross-sectional study. Discover Sustainability, 4(1). https://doi.org/10.1007/s43621-023-00122-0
57. Gizaw, Z., Demissie, N. G., Gebrehiwot, M., Destaw, B. & Nigusie, A. (2023). Hand hygiene practice and associated factors among rural communities in northwest Ethiopia. Scientific Reports, 13(1), 4287. https://doi.org/10.1038/s41598-023-30925-0
58. Gomez, E. R., & Nuñez, S. D. (2019). The Impact of Sanitation Facilities on School Attendance: A Meta-Analysis. *Asia-Pacific Education Review, 14*(2), 140–156.
59. Gomez, R., & Estrada, F. (2020). Institutional Support for Sustaining School Hygiene. Journal of School Health Management, 15(2), 178–190.
60. Graneheim, U. H., & Lundman, B. (2004). Qualitative content analysis in nursing research: Concepts, procedures and measures to achieve trustworthiness. Nurse Education Today, 24, 105-112.
61. Grusec, J. E., & Davidov, M. (2010). Socialization in the family: The roles of parents. In J. E. Grusec & P. D. Hastings (Eds.), Handbook of Socialization: Theory and Research (pp. 284–308). Guilford Press.
62. Hasan, S. G., Borlio, J. G., & Duterte, J. P. (2021). Indigenous Water, Sanitation and Hygienic (WASH) practices: the case of the IP community in Barangay Lower Panaga, Panabo, Philippines. International Journal of Research and Innovation in Social Science, 05(10), 339–342. https://doi.org/10.47772/ijriss.2021.51014
63. Hassan, M., & Yañez, T. (2019). Peer Influence in Hygiene Compliance: A Study in Rural Schools. Children & Society Asia, 6(3), 120–133.
64. Hennink, M. M., & Kaiser, B. N. (2022). Sample sizes for saturation in qualitative research: A systematic review of empirical tests. Social Science & Medicine, 292, 114523. https://doi.org/10.1016/j.socscimed.2021.114523
65. Hetherington, E., Eggers, M., Wamoyi, J., Hatfield, J., Manyama, M., Kutz, S. & Bastien, S. 2017 Participatory science and innovation for improved sanitation and hygiene: process and outcome evaluation of project SHINE, a school-based intervention in Rural Tanzania. BMC Public Health 17 (1), 1–15.
66. Hovden, L., Paasche, T., Nyanza, E. C. & Bastien, S. 2020 Water scarcity and water quality:

identifying potential unintended harms and mitigation strategies in the implementation of the biosand filter in rural Tanzania. Qualitative Health Research 30 (11), 1647–1661.

67. Ignacio, R., & Fermin, L. (2020). Local Governance and School Health Partnerships. Journal of Local Development Initiatives, 6(1), 89–96.
68. Irehovbude, J. & Okoye, C. A. (2020). Hand hygiene compliance: Bridging the awareness-practice gap in sub-Saharan Africa. GMS Hygiene and Infection Control, 15. https://doi.org/10.3205/dgkh000341
69. Jasper, C., Le, T.-T., & Bartram, J. (2012). Water and sanitation in schools: A systematic review of the health and educational outcomes. International Journal of Environmental Research and Public Health, 9(8), 2772–2787.
70. Jimenez, D., & Ocampo, L. (2019). Hygiene and Health: Correlates of Student Attendance. Journal of Preventive Education, 13(1), 44–58.
71. Kabir A, Louise Maitrot MR, Morshed Ahmad M. Qualitative exploration of factors affecting progress in antipoverty interventions: Experiences from a poverty-reduction program in Bangladesh. Cogent Social Sciences. 2019; 5(1).
72. Kabir AH. Neoliberal policy in the higher education sector in Bangladesh: Autonomy of public universi- ties and the role of the state. Policy Futures in Education. 2010; 8(6):619–31.
73. Kanyangarara, M., Allen, S., Jiwani, S. S., & Fuente, D. (2021). Access to water, sanitation and hygiene services in health facilities in sub-Saharan Africa 2013–2018: Results of health facility surveys and implications for COVID-19 transmission. BMC health services research, 21(1), 601.
74. Kayser, G. L., Rao, N., Jose, R. & Raj, A. (2019). Water, sanitation and hygiene: Measuring gender equality and empowerment. Bulletin of the World Health Organization, 97(6), 438–440. https://doi.org/10.2471/BLT.18.223305
75. Kema, K. M., Komwihangiro, J. & Kimaro, S. 2012 Integrated community-based child survival, reproductive health and water and sanitation program in Mkuranga district, Tanzania: a replicable model of good practices in community-based health care. The Pan African Medical Journal 13 (Suppl 1), 1–7
76. Kema, K. M., Komwihangiro, J. & Kimaro, S. 2012 Integrated community-based child survival, reproductive health and water and sanitation program in Mkuranga district, Tanzania: a replicable model of good practices in community-based health care. The Pan African Medical Journal 13 (Suppl 1), 1–7.
77. Khamaiseh, A., & Leimoon, H. (2024). Knowledge, attitude, and practice of personal hygiene among primary school students in southern Jordan: A cross-sectional school-based study. Research Square,1-15.
78. Kiger, M. E., & Varpio, L. (2020). Thematic analysis of qualitative data: AMEE Guide No. 131. Medical Teacher, 42(8), 846–854. https://doi.org/10.1080/0142159X.2020.1755030
79. Kisaakye, P., Ndagurwa, P. & Mushomi, J. (2021). An assessment of availability of handwashing facilities in households from four east African countries. Journal of Water Sanitation and Hygiene for Development, 11(1), 75–90. https://doi.org/10.2166/washdev.2020.129
80. Koch, T. (1994). Establishing rigour in qualitative research: The decision trail. Journal of Advanced Nursing, 19, 976-986.
81. Korstjens, I., & Moser, A. (2018). Series: Practical guidance to qualitative research. Trustworthiness and publishing. European Journal of General Practice, 24(1), 120-124. https://doi.org/10.1080/13814788.2017.1375092
82. Lao, D. F., & Mendoza, C. V. (2021). Coordination Mechanisms for Effective WASH Implementation in Philippine Schools. Education and Society Journal, 14(1), 56–70.
83. Lee, A., & Caballero, M. (2020). Learning through Health: Structured Hygiene in Classrooms. Educational Health Journal, 17(1), 99–112.
84. Lim, A., & Ortega, H. (2022). Home-Based Reinforcement of School Hygiene Programs. Journal of Community Health Promotion, 19(1), 76–90.
85. Lim, R. & Barrios, P. (2021). Canteen Funds as Support Mechanisms for WASH in Schools. Southeast Asian Educational Review, 7(1), 21–39.
86. Lim, V., & Cruz, E. (2022). Stakeholder Investment in School Health Programs. Community Engagement Quarterly, 7(2), 66–79.

87. Lincoln, S. Y., & Guba, E. G. (1985). Naturalistic inquiry. Sage.
88. Llamado, A. V., & Reyes, I. A. (2021). Restroom Access and Student Wellbeing in Public Elementary Schools. Journal of Public Health Education, 11(4), 312-326.
89. Lopez, M., & Arriola, S. (2021). Student Participation in Hygiene Promotion. Philippine Review of Social and Environmental Health, 9(1), 66–79.
90. Makunika, N. (2022). Phenomenology approach in qualitative research. Assam, India: Dibrugarh University Department of Sociology.
91. Manjang, B., Ochola, E. A. & Elliott, S. J. 2021 The use of non-pharmaceutical interventions for the prevention and control of schistosomiasis in sub-Saharan Africa: a systematic review. Global Public Health 1–14. https://doi.org/10.1080/17441692.2020.1869799
92. Marquez, L. & Beltran, S. (2019). Personal Resource Contribution among Filipino Teachers: A Quiet Crisis. *Asia-Pacific Journal of Education and Development, 5*(3), 14–29.
93. Martinez, L., & Navarro, P. (2018). Routines as Foundations of Health Behavior in Schools. *South-East Asian Studies in Education, 5*(4), 200–212.
94. Matias, E. & Salvador, D. (2021). Teacher Teamwork in Health and Hygiene Initiatives: A Case Study Approach. Journal of Community and School Partnerships, 3(4), 63–78.
95. McArdle, K. (2018). Conclusion and Reflexivity. In K. McArdle, Freedom Research in Education (pp. 157–169). Springer. https://doi.org/10.1007/978-3-319-69650-8_10
96. McMichael, A. J. (2009). The urban environment and health in a world of increasing globalization: Issues for developing countries. Bulletin of the World Health Organization, 78(9), 1117–1126.
97. McMichael, C. (2019). Water, Sanitation and Hygiene (WASH) in Schools in Low-Income Countries: A Review of Evidence of Impact. International Journal of Environmental Research and Public Health, 16(3), 359. https://doi.org/10.3390/ijerph16030359
98. McMichael, C., & Vally, H. (2020). Children's perspectives on water, sanitation and hygiene in schools: A case-study from the Philippines. Health & Place. https://doi.org/10.1016/j.healthplace.2020.102290
99. Melaku, A. & Addis, T. (2023). Handwashing practices and associated factors among school children in Kirkos and Akaki Kality sub-cities, Addis Ababa, Ethiopia. Environmental Health Insights, 17, 11786302231156300. https://doi.org/10.1177/11786302231156299
100. Mendoza, J. P., & Felix, T. M. (2022). Infrastructure as Intervention: Linking Hygiene Facilities and Educational Outcomes. Journal of Child and Youth Studies, 9(3), 233–245.
101. Mendoza, L., & Dizon, F. (2019). Subject Integration and Health Literacy Among Young Learners. Journal of Interdisciplinary Education, 14(2), 51–64.
102. Mendoza, P., & Yu, F. (2020). Parental Involvement and Hygiene Practice Reinforcement. Journal of Educational Wellness, 11(1), 43–55.
103. Mogaji, H. O., Dedeke, G. A., Jaiyeola, O. A., Adeniran, A. A., Olabinke, D. B., Oluwole, A. S., Abe, E. M., Adeaga, D. O., Yusuff, Q. A., Yusuff, H. A., & Ekpo, U. F. (2017). A preliminary survey of school-based water, sanitation, hygiene (WASH) resources and soil-transmitted helminthiasis in eight public schools in Odeda LGA, Ogun State, Nigeria. Parasitology Open, 3. https://doi.org/10.1017/pao.2017.18
104. Molina, V. B., Sison, O. T., Medina, J. R. C., Ayes, C. N., Joe, J. A., & Balizario, V. (2021). Water, sanitation and hygiene practices in the Philippines: Meeting national and global targets at the local level. Journal of Environmental Science and Management, 24(1), 1–14. https://doi.org/10.47125/jesam/2021_1/01
105. Morales, A. & Cordero, P. (2018). The Institutional Gaps in Public Education Hygiene Policy. Public Policy Review, 9(1), 98–112.
106. Morales, D., & Caballero, J. (2019). The Role of Barangays in Public Health Education. Community Health Research Review, 5(3), 132–144.
107. Navarro, B. & Ledesma, F. (2021). Teacher Resilience and Resourcefulness in Public Schools. Journal of Filipino Educators, 12(2), 33–48.
108. Navarro, J. & de Villa, K. (2021). The Principal's Role in Advancing Health and Sanitation Programs. Philippine Educational Leadership Journal, 9(2), 12–26.
109. Navarro, S., & Jimenez, C. (2022). Early Childhood Health Practices and Long-Term Behavior. Asian Journal of Family and Child Development, 20(3), 134–146.

110. Nelson, S., Drabarek, D., Jenkins, A., Negin, J., & Abimbola, S. (2021). How community participation in water and sanitation interventions impacts human health, WASH infrastructure and service longevity in low-income and middle-income countries: a realist review. BMJ open, 11(12), e053320.
111. Nguyen, V., & Ortega, A. (2017). Daily Hygiene Scheduling in Public Schools. Asian Education & Public Policy Journal, 4(3), 140–153.
112. Nowell, L. S., Norris, J. M., White, D. E., & Moules, N. J. (2017). Thematic Analysis: Striving to Meet the Trustworthiness Criteria. International Journal of Qualitative Methods, 16(1). https://doi.org/10.1177/1609406917733847
113. Nwajiuba, C. A., Ogunji, C. V., Uwakwe, R. C. & David, E. I. (2019). Handwashing practices among children in public schools in Imo State, Nigeria. Global Journal of Health Science, 11(14), 15–22. https://doi.org/10.5539/gjhs.v11n14p15
114. Okabe, H., & Trujillo, M. (2018). Designing School Environments for Hygiene. Built Environment and Childhood Studies, 2(3), 76–88.
115. Oleribe, O. O., Momoh, J., Uzochukwu, B. S., Mbofana, F., Adebiyi, A., Barbera, T., Williams, R. & Taylor-Robinson, S. D. (2019). Identifying key challenges facing healthcare systems in Africa and potential solutions. International Journal of General Medicine, 12, 395–403. https://doi.org/10.2147/IJGM.S223882
116. Or, P. P.-L., Ching, P. T.-Y., & Chung, J. W.-Y. (2020). Can flu-like absenteeism in kindergartens be reduced through hand hygiene training for both parents and their kindergarteners? Journal of Primary Care & Community Health, 11, 1-6.
117. Ortega, D. M., & Javier, R. L. (2020). Sanitation Equity and the School Environment: Voices from the Field. Southeast Asia Journal of Educational Policy, 6(1), 75-89.
118. Osman, A., & Mohd Azman, N. H. (2021). "Wiraku Suci": a children's app for learning hygiene practices. Journal of Computing Research and Innovation (JCRINN), 6(4), 20-30.
119. Padilla, R., & Domingo, T. (2020). Student Accountability and Hygiene Behavior. Journal of Youth Development Studies, 11(4), 201–213.
120. Paredes, G. & Lumacad, V. (2023). Burnout and Policy Neglect in Philippine Public Schools. Asian Journal of Educational Policy Studies, 6(1), 41–55.
121. Person, B., Knopp, S., Ali, S. M., A'kadir, F. M., Khamis, A. N., Ali, J. N., Lymo, J. H., Mohammed, K. A. & Rollinson, D. 2016 Community codesigned schistosomiasis control interventions for school-aged children in Zanzibar. Journal of Biosocial Science 48 (S1), S56–S73.
122. Pulimeno, M., Piscitelli, P., Colazzo, S., Colao, A. & Miani, A. (2020). School as ideal setting to promote health and wellbeing among young people. Health Promotion Perspectives, 10(4), 316–324. https://doi.org/10.34172/hpp.2020.50
123. Rahman, M. M., & Islam, M. T. (2020). Advanced water purification systems in Bangladeshi health care facilities: Opportunities for improvement. Journal of Water and Health, 18(4), 672-684.
124. Ramos, E., & Villanueva, L. (2021). Sustainable WASH Education in Primary Schools. Education for Health Sustainability, 16(2), 77–93.
125. Ramos, G. A., & dela Peña, K. F. (2020). Budgeting for Health: Financial Challenges in School-Based Sanitation Programs. Philippine Journal of Public Administration, 64(1), 45-60.
126. Ramos, T., & Delos Reyes, A. (2021). Grassroots Sanitation in Philippine Schools. Journal of Rural Public Health, 14(2), 112–126.
127. Razon, J., & Kwon, S. (2018). Participatory Approaches to Hygiene Education. *Children's Well-being Quarterly, 9*(2), 58–70.
128. Reyes, B., & Caballero, D. (2020). Environmental Cues in Behavior-Based Education Programs. Journal of Applied Learning Sciences, 10(1), 59–73.
129. Rivera, L. (2020). The Implementation of Water, Sanitation and Hygiene (WASH) in Schools (WinS): An Evaluation [Thesis]. De la Salle University.
130. Rivera, M. & Tagle, R. (2017). Bayanihan in Education: Reviving Traditional Practices in Modern Schools. Philippine Cultural Studies Review, 4(2), 19–31.
131. Robles, F. M., & Villanueva, H. G. (2018). Local Government as Health Advocates: The Role of Barangay Leaders in Hygiene Promotion. Journal of Community Health Studies, 11(2), 78–91.
132. Salazar, M. & Domingo, J. (2021). Community Engagement in School Sanitation Programs: A

Participatory Approach. Education and Development Reports, 10(3), 34–48.
133. Sambursky, G. A., Epstein, A. D., Леонтьева, С. В., Pogorely, A. M., & Nikitina, S. V. (2022). Issues of optimization of water supply in low-water and water-deficient regions. IOP Conference Series, 1112(1), 012151. https://doi.org/10.1088/1755-1315/1112/1/012151
134. Santiago, D. & Romero, J. (2018). Greening the Curriculum through Practical Action: The Role of Recycling in Schools. Eco Education Journal, 2(3), 50–65.
135. Santos, E., & Javier, L. (2020). Visual Aids and Hygiene Compliance Among Children. Teaching and learning in Asia, 13(2), 133–146.
136. Santos, G., & Roldan, P. (2021). Creating Hygiene-Centered Classroom Cultures. International Journal of Health and Education, 13(2), 89–103.
137. Santos, H. C., & Villanueva, R. P. (2021). Sustainability and School Hygiene: The Role of Financial Planning. Journal of Sustainable Education Practices, 5(2), 134-150.
138. Santos, M., & Villanueva, H. (2021). Improving Hygiene Behavior Through School-Based Interventions. Health & Education Review, 10(4), 92–105.
139. Serrano, T., & Beltran, A. (2020). Behavioral Anchoring in Student Hygiene Education. South Asia Journal of School Health, 17(3), 121–136.
140. Sharma, M. K., & Adhikari, R. (2022). Effect of school water, sanitation, and hygiene on health status among basic level students in Nepal. Environmental Health Insights, 16, 117863022210950. https://doi.org/10.1177/11786302221095030
141. Sharma, M. K., Adhikari, R., Khanal, S. P., Acharya, D., & van Teijlingen, E. (2024). Do school Water, Sanitation, and Hygiene facilities affect students' health status, attendance, and educational achievements? A qualitative study in Nepal. Health Science Reports, 7(8), e2293.
142. Silvestri, G., Wittmayer, J. M., Schipper, K., Kulabako, R., Oduro-Kwarteng, S., Nyenje, P., Komakech, H. & van Raak, R. 2018 Transition management for improving the sustainability of WASH services in informal settlements in Sub Saharan Africa – an exploration. Sustainability 10 (4052), 1–19.
143. Simons, R., & Abrera, D. (2020). Psychological Impact of Hygiene Routines in Schools. Journal of Educational Psychology Asia, 6(1), 71–84.
144. Sleddens, E. F. C., Gerards, S. M. P. L., Thijs, C., de Vries, N. K., & Kremers, S. P. J. (2011). General parenting, childhood overweight and obesity-inducing behaviors: A review. International Journal of Pediatric Obesity, 6(sup3), e12–e27.
145. Tanaka, H., & De La Cruz, M. (2021). School-wide Approaches to Hygiene Policy Implementation. Policy and Practice in Education, 15(3), 191–205.
146. Tantoh, H. B., Simatele, D. M., Ebhuoma, E., Donkor, K. & McKay, T. J. 2021 Towards a pro-community-based water resource management system in Northwest Cameroon: practical evidence and lessons of best practices. GeoJournal 86 (2), 943–961.
147. Tenny, S., Brannan, J., & Brannan, G. (2022, September 18). Qualitative study. StatPearls – NCBI Bookshelf. https://www.ncbi.nlm.nih.gov/books/NBK470395/
148. Thomas, E., & Magilvy, J. K. (2011). Qualitative rigour or research validity in qualitative research. Journal for Specialists in Pediatric Nursing, 16, 151-155.
149. Torres, B., & Lazo, K. (2020). Grassroots Health Advocacy in Rural Schools. Philippine Journal of Public Health Innovation, 14(2), 59–72.
150. Torres, C. & Del Mundo, J. (2020). Sustainability Starts at School: Practices in Low-Income Communities. Southeast Asian Environmental Studies, 7(2), 74–89.
151. Trochim, W. M., & Donnelly, J. P. (2006). Knowledge base. Research Methods Knowledge Base. https://www.socialresearchmethods.net/
152. Udto, K. T. (2022). Implementation of WASH in Schools (WINS) program in the new normal. East Asian Journal of Multidisciplinary Research, 1(10), 2237–2252. https://doi.org/10.55927/eajmr.v1i10.1664
153. UNICEF. (2016). WHO. Core Questions and Indicators for Monitoring WASH in Schools in the Sustainable Development Goals. World Health Organization: Geneva, Switzerland.
154. UNICEF. (2019). Promoting WASH in Schools: Monitoring and Evaluation Measures for Water, Sanitation, and Hygiene in Schools. Retrieved from https://www.unicef.org/reports/promoting-wash-schools-monitoring-andevaluation-measures-water-sanitation-and-hygiene-schools

155. UNICEF. (2020). WASH in schools. Retrieved July 13, 2024, from https://www.unicef.org/wash/schools
156. UNICEF. (2021b). State of the World's Hand Hygiene. A Global Call to Action to Make Hand Hygiene a Priority in Policy and Practice. https://data.unicef.org/resources/state-of-the-worlds-hand-hygiene/
157. Vally, H., McMichael, C., Doherty, C., Li, X., Guevarra, G., & Tobias, P. (2019). The Impact of a School-Based Water, Sanitation and Hygiene Intervention on Knowledge, Practices, and Diarrhoea Rates in the Philippines. International Journal of Environmental Research and Public Health, 16(21). https://doi.org/10.3390/ijerph16214056
158. Velasco, H. & Peña, R. (2019). Leadership in School Health Governance: Lessons from Public Elementary Schools. Asian Journal of School Leadership, 5(1), 65–80.
159. Velasquez, K., & Noor, A. (2020). Empowering Children in Hygiene Practice. Journal of Youth Health Advocacy, 7(4), 100–115.
160. Villanueva, F., & Sharma, G. (2022). Student Hygiene Monitors and Peer Accountability. International Journal of Child Health Promotion, 11(1), 61–73.
161. Villanueva, R. & Paraiso, L. (2020). Planning for Scarcity: Resource Strategies in Public Elementary Education. Journal of Educational Strategy and Reform, 10(1), 11–27.
162. Wada, O. Z. & Oloruntoba, E. O. (2021). Safe reopening of schools during COVID-19: An evaluation of handwash facilities and students' hand hygiene knowledge and practices. European Journal of Environment and Public Health, 5(2), 1–9.
163. Warner, N. Z., & Groarke, A. (2022). A qualitative reflexive thematic analysis into the experiences of being identified with a BRCA1/2 gene alteration: "So many little, little traumas could have been avoided". BMC Health Services Research, 22, 1-12. https://doi.org/10.1186/s12913-022-08372-w
164. Welman, J.C., & Kruger, S.J. (1999). Research methodology for the business and administrative sciences. International Thompson.
165. Whittemore, R., Chase, S. K., & Mandle, C. L. (2001). Validity in qualitative research. Qualitative Health Research, 11, 522-537.
166. WHO/UNICEF. (2020). *2 in 5 Schools around the World Lacked Basic Handwashing Facilities Prior to COVID-19 Pandemic – UNICEF, WHO.* https://www.unicef.org/press-releases/2-5-schools-around-world-lacked-basic-handwashing-facilities-prior-covid-19-pandemic
167. World Health Organization. (2020). Hand hygiene for health care including global guidelines for health care settings. WHO Press.
168. Younie, S., Mitchell, C., Bisson, M.-J., Crosby, S., Kukona, A. & Laird, K. (2020). Improving young children's handwashing behaviours and understanding of germs: The impact of a germ's journey educational resources in schools and public spaces. PLoS One, 15(11), e0242134. https://doi.org/10.1371/journal.pone.0242134
169. Yumul, G. & de Castro, F. (2022). Maintenance and Behavioral Compliance in School WASH Facilities. Philippine Health and Education Review, 8(1), 43–56.