
***EXTENT OF STAKEHOLDERS' SUPPORT AND PARTICIPATION ON
WASH IN SCHOOLS (WINS) IMPLEMENTATION IN KIPOLOT
INTEGRATED SCHOOL AND LEARNERS' HEALTH STATUS***

***Krish P. Castro**

Valencia Colleges (Bukidnon) Incorporated Hagkol, Valencia City Philippines.

Article Received: 05 March 2026

*Corresponding Author: Krish P. Castro

Article Revised: 23 March 2026

Valencia Colleges (Bukidnon) Incorporated Hagkol, Valencia City Philippines.

Published on: 13 April 2026

DOI: <https://doi-doi.org/101555/ijrpa.1570>

ABSTRACT

This study was conducted to find the relationship between the extent of stakeholders' support and participation in wash-in-school (WINS) implementation and learners' health status. It applied the descriptive-correlational research design. It was conducted in the public elementary schools in Quezon III District, Division of Bukidnon, School Year 2022-2023. The study's respondents were all the public-school teachers and parents of the said locale. It is a researcher-made instrument used to gather the needed information. The data were analyzed using statistical tools such as mean, standard deviation, frequency count, percentage, and Pearson r Product Moment Correlation Coefficient.

The subsequent research unveiled the following results: There was a *High Extent* of Wash-In-School (WINS) participation among stakeholders in Kipolot Integrated School. The majority of learners are categorized as *Normal* in terms of their health status. It suggests that a significant portion of the student population maintains a standard level of health and well-being. There was no significant relationship between the extent of WINS participation among stakeholders in Kipolot Integrated School and learners' health status.

Considering the findings and conclusions, the following recommendations are proposed: Teachers may persist in prioritizing and reinforcing hygiene and sanitation behaviors among learners. Parents should continue fostering and endorsing their children's health and well-being. Parents must prioritize good habits such as maintaining a balanced diet, exercising regularly, and ensuring appropriate relaxation to support their children's ideal health. Parents are urged to consider other aspects affecting their children's health and prioritize comprehensive strategies to enhance their children's overall health and welfare.

KEYWORDS: *Extent of Stakeholders' Support, Participation, Wash in School Implementation, Learners' Health Status.*

INTRODUCTION

The strength of the school lies on a good leadership of the administrators, the strength of the administrator, lies on the cooperation of the teachers, the strength of the teacher's lies on the support of the stakeholders, external stakeholders.

Stakeholders, as defined by House et al. and referenced by Bipin, Kamal, and Rabin (2012), are people, organizations, or groups who have the potential to favorably or negatively impact a proposed project or who have the ability to influence the project's result. Increasingly, it is understood that for an enterprise to be genuinely sustainable, civil society must be actively involved. Whether actively or passively, involving the public in the decision-making process brings a variety of viewpoints, experiences, and information that inspire the development of new solutions. As a result, this raises the level of proficiency of individuals involved in the planning and implementation of projects.

Moreover, if early involvement of project stakeholders can result in early consensus, the potential for significant conflicts that are detrimental to the project decreases and the likelihood of long-lasting and enhanced solutions increases. Comprehending the viewpoints and concerns of individuals impacted by a planned project or its alternatives is crucial for guaranteeing the triumph of the endeavor. Stakeholder involvement is important and has to be taken into consideration in many parts of project planning and implementation. Identifying local institutions or processes to build support for the project is one of these two aspects. Another is identifying stakeholders' interests, importance, and influence over the proposed project. Finally, a framework and approach are presented for incorporating stakeholders at various project planning and execution stages.

Various authors differentiated between primary and secondary stakeholders. Primary stakeholders today include rating agencies, responsible investment funds, and shareholder activists in addition to suppliers or business partners situated in areas far from a corporation's headquarters, according to Stakeholder Associates (2005). In addition to government regulators and environmental groups, secondary stakeholders today include worldwide multi-stakeholder organizations and networks that aim to influence the norms and standards of the market, as well as civil society organizations advancing social and health agendas.

The primary stakeholders are those who are ultimately impacted positively or negatively by an organization's actions, particularly internal stakeholders. Intermediaries, or secondary

stakeholders, are people who are influenced by an organization's actions but not directly. It is imperative to incorporate a diverse variety of stakeholders and viewpoints; the more varied the group, the more probable it is that the process and its results will be accepted as legitimate (EPA, 2010) and that the project will succeed.

The purpose of this study was to determine the association between the health status of students and the level of WINS participation among Kipolot Integrated School stakeholders.

Conceptual Framework of the Study

The Hierarchy of Human Needs (Abraham Maslow, 1943) and DO 10, S. 2016 - Policy and Guidelines for the Comprehensive Water, Sanitation and Hygiene in Schools (WINS) Program serve as the foundation for this study.

In order to ensure that students develop lifelong positive hygiene and sanitation behaviors, the Department of Education's Policy aims to: ensure that students have accurate knowledge and understanding of effective hygiene and sanitation projects; enhance equitable access to safe water, adequate toilets, and hand washing facilities; guarantee that students practice good hygiene and sanitation habits; guarantee that schools are kept safe and clean through solid waste management, proper drainage, the removal of mosquito breeding grounds to prevent vector-borne diseases, and food sanitation; and involve public and private partners in program implementation and sustainability.

Additionally, it is based on Maslow's Hierarchy of Needs. It is a psychological theory of motivation that includes a five-tier model of human wants, which is sometimes represented as tiers within a pyramid with hierarchical levels. The wants are as follows, starting from the bottom of the hierarchy: physiologic (clothes and food), safety (health, job security), love and belonging (friendship), esteem, and self-actualization. Prior to addressing needs higher up the hierarchy, people have to attend to those lower down.

This study is supported by the fact that children's needs for security and health should be satisfied in order for them to grow up strong, healthy, and immune to infections and diseases, making them healthy learners both inside and outside of the classroom.

Stakeholder theory, developed by Freeman in 1984, looks at how an organization interacts with both its internal and external surroundings. It also looks at how these connections affect how the company runs. Any person or entity that has the potential to influence or be impacted by your organization is considered a stakeholder. Stakeholders might come from both inside and outside the company. Among the numerous parties involved in a business are its clients,

staff members, investors, suppliers, government agencies, nonprofit community organizations, and the local community.

Stakeholder theory's basic premise is that companies who manage their connections with stakeholders well will survive and perform better than those that don't. Freeman contends that corporations ought to foster particular stakeholder competencies. These include making a commitment to track stakeholder interests, coming up with plans for dealing with stakeholders and their interests in an efficient manner, breaking down and classifying stakeholder interests into manageable chunks, and making an effort to make sure organizational activities satisfy stakeholder needs.

Figure 1 presents the schematic Diagram of the study.

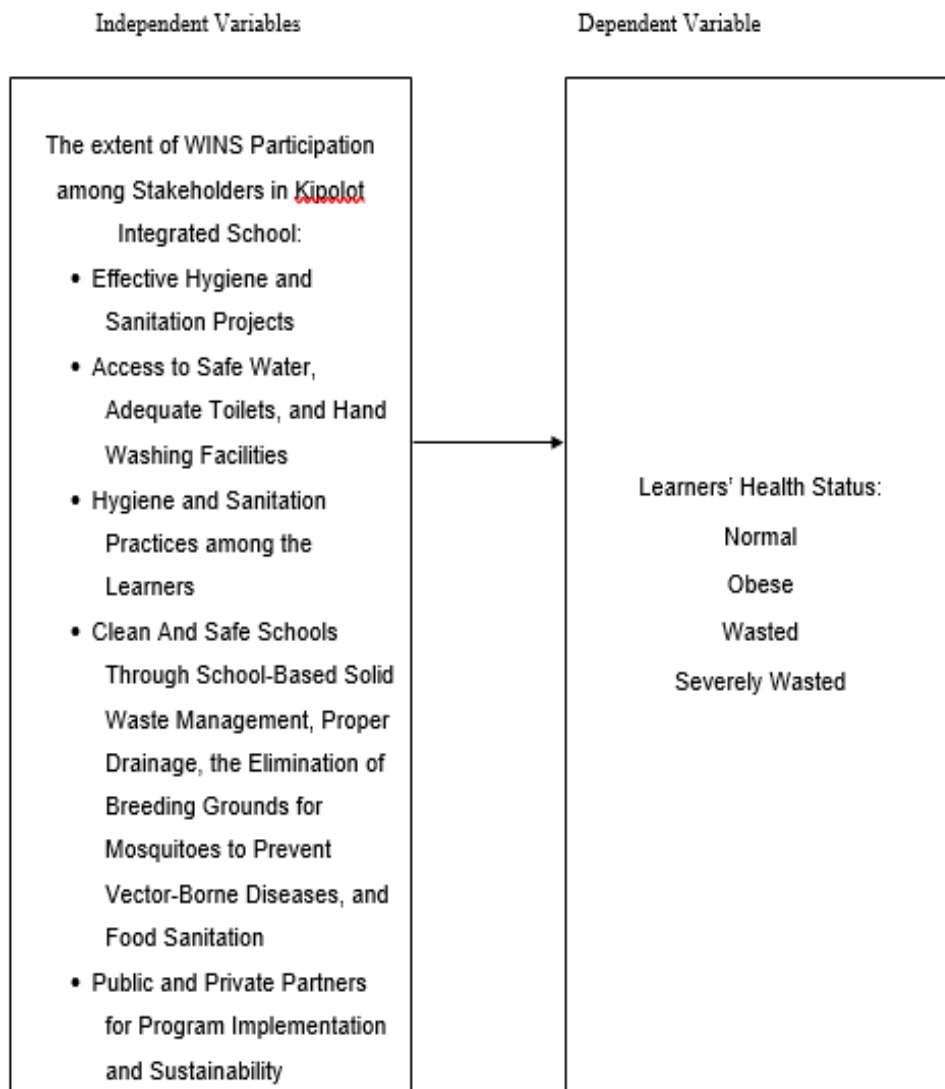


Figure 1. Schematic Diagram showing the Relationship of the Independent and Dependent Variables of the Study.

Statement of the Problem

This study was conducted to find the relationship between the extent of stakeholders' support and participation in implementing Water, Sanitation, and Hygiene in Schools (WINS) and learners' health status, School Year (SY) 2022-2023.

Specifically, this study tried to answer the following questions:

1. What is the extent of Water, Sanitation, and Hygiene in Schools (WINS) participation among stakeholders in Kipolot Integrated School in terms of adequate hygiene and sanitation projects; access to safe water, adequate toilets, and hand washing facilities; hygiene and sanitation practices among the learners clean and safe schools through school-based solid waste management, proper drainage, the elimination of breeding grounds for mosquitoes to prevent vector-borne diseases, and food sanitation; and public and private partners for program implementation and sustainability?
2. What is the learners' health status?
3. Is there a significant relationship between the extent of Water, Sanitation, and Hygiene in Schools (WINS) participation among stakeholders in Kipolot Integrated School and learners' health status?

Hypothesis of the Study

The following null hypothesis was tested in this study:

H₀: There is no significant relationship between the extent of Water, Sanitation, and Hygiene in Schools (WINS) participation among stakeholders in Kipolot Integrated School and learners' health status.

Delimitations of the Study

This research was delimited to finding the relationship between the extent of WINS participation among stakeholders in Kipolot Integrated School and learners' health status.

In order to create clean and safe schools through school-based solid waste management, proper drainage, the removal of mosquito breeding grounds to prevent vector-borne diseases, and food sanitation, the independent variables were limited to the extent of WINS participation among stakeholders in Kipolot Integrated School in terms of effective hygiene and sanitation projects; access to safe water, adequate toilets, and hand washing facilities; and public and private partners for program implementation and sustainability. The health status of the students at Kipolot Integrated School in the District of Quezon III for the school year 2022–2023 was designated as the dependent variable.

This study gathered data through the researcher-made survey-questionnaire. The respondents of this study were delimited to the teachers and parents of schools located in Quezon III, District, Bukidnon Division.

Descriptive statistics including mean, standard deviation, frequency count, percentage, and Pearson r Product Moment Correlation Coefficient were used to examine the data.

Significance of the Study

This study was conducted as the researcher believes that it would gain and provide significance to the following end-users:

Initially, the present research would provide valuable lessons and guidelines primarily for advising and empowering development organizations as well as other program/project management agents and agencies. Secondary, the study would aid program/project managers in gaining a greater understanding and appreciation of the concept of stakeholders and their contribution to the success of a project. Thirdly, the study will serve as a resource for other researchers who will be conducting related research. Finally, the research will contribute to the development efforts of organizations regarding the participation of project stakeholders.

Definition of Terms

The following terms have been operationally defined for greater clarity between the researcher and the readership.

Extent of Water, Sanitation, and Hygiene in Schools (WINS) Participation among Stakeholders. The extent of water, sanitation, and hygiene in schools (WINS) participation among stakeholders refers to the involvement of the parents and community in the WINS program at school.

Learners' Health Status. Learners' Health Status refers to the report on the health condition of the learners. It is based on the nutritional status as reported by the teachers.

Normal. Normal refers to a child whose BMI-for-age falls between -2 to +2 z-score line based on WHO CGS.

Nutritional Status. Nutritional Status refers to the body's condition resulting from food intake, absorption, and utilization. Clinical examinations, biochemical analyses, anthropometric measurements, and dietary studies are used singly or in combination to determine this condition (FNRI).

Obese. Obese children weighing too much for weight-for-height and BMI-for-age are more significant than the +3 z-score line based on WHO CGS.

Overweight. Being overweight is a child weighing too much for their weight-for-height and BMI-for-age, which falls between +2 and +3 z-score line based on WHO CGS.

Stakeholders. Stakeholders refer to the individuals or groups who support and participate in the DepEd activities, programs, and projects for the welfare of the students. They comprise teachers, parents, government officials, and civilian volunteers/NGOs.

Wasted. Wasted refers to a thin child whose BMI-for-age falls between -2 to -3 z-score line based on WHO CGS.

WINS. WINS refers to the Water, Sanitation, and Hygiene in Schools (WINS) Program, which advocates cleanliness and personal hygiene, particularly among school child.

METHODOLOGY

This chapter is composed of the Research Design, Research Locale, Respondents of the Study, Sampling Procedure, Research Instrument, Validity of the Instrument, Scoring Procedure, Data Gathering Procedure, and Treatment of Data.

Research Design

This study applied the descriptive-correlational research design. It determined the relationship between the extent of WINS participation among stakeholders in Kipolot Integrated School and learners' health status.

Data on the extent of WINS participation among stakeholders in Kipolot Integrated School and learners' health status were obtained through the researcher-made questionnaire and the learners' health status were based on the report of the learners' nutritional status.

Research Locale

This study was conducted in the public elementary schools in Quezon III District, Division of Bukidnon, school year 2023-2024.

Quezon, officially known as the Municipality of Quezon (Cebuano: Lungsod sa Quezon; Tagalog: Bayan ng Quezon), is a municipality of the first class in the Philippine province of Bukidnon.

Lagislis Elementary School is located in Barangay C-Handumanan in the municipality of Quezon, province of Bukidnon. There were one thousand people living there as of the 2015 Census. This accounted for 0.96 percent of the population of Quezon.

The Kiburiao Central School is situated in Barangay Kiburiao, a barangay in Quezon, Bukidnon. The 2015 Census determined its population to be 4,531. This represented 4.35 percent of Quezon's total population.

The Lipa Elementary School is situated in Barangay Lipa, a barangay in the municipality of Quezon, Bukidnon. The 2015 Census determined its population to be 1,158. This represented 1.11 percent of Quezon's total population.

Minsamongan Elementary School is located in Minsamongan, a barangay in Quezon, Bukidnon. The population was 1,069 according to the 2015 Census. This represented 1.03 percent of Quezon's total population.

Both Palacapao Elementary School and Kipolot Integrated School are located in Palacapao, a barangay in Quezon, Bukidnon. The population was 2,899 according to the 2015 Census.

Puntian Elementary School is located in Puntian, a barangay in the municipality of Quezon, Bukidnon. The population was 2,653 according to the 2015 Census. This represented 2.55 percent of Quezon's total population.

Respondents of the Study

The respondents of the study were all the public-school teachers and parents in the public elementary schools of Quezon III District, Division of Bukidnon, SY 2023-2024. The parents included were only those Home Room presidents of the every classroom officers.

Research Instrument

This study used is a researcher-made. It is a survey-questionnaire which is composed of two parts.

Part I discussed how much WINS has been involved with Kipolot Integrated School stakeholders in terms of successful hygiene and sanitation projects; access to clean water, sufficient restrooms, and hand washing stations; hygiene and sanitation practices among students in safe and clean schools through school-based solid waste management, public and private partners for program implementation and sustainability. There are five objects in each region. The five-point Likert scale serves as the basis for the choices' columns. The reply only needed to cross out the column containing the response of choice.

Part II was about the learners' health status to be filled-up by the teacher-advisers.

Data Collection Procedure

In accordance with Valencia Colleges (Bukidnon) Incorporated's standard operating procedure for conducting studies, the protocol for this research was followed. First, a letter of approval and recommendation from the Dean of Graduate School, Dr. Isaias S. Sealza was requested. Then, it was submitted to Dr. Victoria V. Gazo, the Superintendent of Schools for the Division of Bukidnon. When the approval has been secured, the researcher approached Sir Fhebrez Ido B. Ylagan, the Public Schools District Supervisor for the Quezon III District, for permission. Next, the School Heads of the public elementary schools were approached for permission to conduct the study on their respective schools. Finally, the questionnaires were distributed to the selected respondents.

Statistical Treatment of Data

Within the scope of this study, the following statistical methods were utilized:

Mean and standard deviation were applied to determine the extent of WINS participation among stakeholders in Kipolot Integrated School.

The health status of the students was assessed using the Frequency Count and Percentage methods.

Pearson r Product-Moment Correlation Coefficient r was utilized to find the significant relationship between the extent of WINS participation among stakeholders in Kipolot Integrated School and learners' health status.

Summary

This study was conducted to find the relationship between extent of stakeholders' support and participation on Wash in School (WINS) implementation and learners' health status. It ascertained the degree of Wash in School involvement among the Kipolot Integrated School's stakeholders concerning successful hygiene and sanitation initiatives; availability of clean water, sufficient restrooms, and hand washing stations; hygiene and sanitation practices among the students clean and safe schools through school-based solid waste management, appropriate drainage, the removal of mosquito breeding grounds to prevent vector-borne diseases, and food sanitation; and public and private partners for program implementation and sustainability. The pupils' health state was also ascertained by it. Furthermore, a noteworthy correlation was discovered between the health status of students and the level of wash-in school engagement among Kipolot Integrated School stakeholders.

It applied the descriptive-correlational research design. It was conducted in the public elementary schools in Quezon III District, Division of Bukidnon, School Year 2022-2023. The respondents of the study were all the public-school teachers and parents of the said locale. It used is a researcher-made instrument to gather the needed. The data were analyzed by using the statistical tools mean, standard deviation, frequency count, percentage, and Pearson r Product Moment Correlation Coefficient.

Findings

The subsequent research unveiled the following results:

Stakeholders in Kipolot Integrated School participated in Wash in School (WINS) to a high extent in terms of successful hygiene and sanitation projects; access to clean water, sufficient restrooms, and hand washing facilities; healthy and safe school environments through solid waste management in the school, appropriate drainage, the removal of mosquito breeding grounds to prevent vector-borne diseases, and food sanitation; and public and private partners for program implementation and sustainability.

When it comes to their health, most students are classified as "Normal". This implies that a sizeable segment of the student body keeps their health and wellbeing at a typical level.

The degree to which Kipolot Integrated School stakeholders participated in Wash In School did not significantly correlate with the health status of the students.

CONCLUSIONS

This study derived the following conclusions from the previously mentioned findings.

The findings indicate that stakeholders at Kipolot Integrated School have a high degree of involvement in the Wash in School (WINS) program. This includes active involvement in promoting hygiene, sanitation, and establishing cooperative relationships to implement the program. The initiatives undertaken demonstrate a holistic strategy to advance the well-being and environmental stability in Kipolot Integrated School, District of Quezon III.

The results show that a considerable portion of the pupils at Kipolot Integrated School in the District of Quezon III maintain a decent level of health and well-being, with a "Normal" health status. This emphasizes the favorable health conditions that are common among the student body, demonstrating the effectiveness of health-related programs and overall positive health outcomes within the school community.

The research findings indicate that there is no substantial correlation between the level of engagement in Wash in School by stakeholders at Kipolot Integrated School and the health

status of the learners. This indicates that there may be other factors that have a greater impact on the health state of the students in the school, apart from their involvement in WINS. Additional research is required to identify and tackle these aspects in order to enhance the health outcomes of the pupils.

Recommendations

Taking into account the findings and conclusions, the following recommendations were proposed:

Teachers may persist in giving priority to and reinforcing hygiene and sanitation behaviors among learners. It is imperative for them to engage in collaboration with relevant parties, provide continuous availability of uncontaminated water, sufficient sanitation facilities, hand hygiene infrastructure, and establish effective waste disposal systems. In addition, teachers should take measures to promote effective drainage and eradicate mosquito breeding sites, while also promoting behaviors that maintain food sanitation.

Parents are advised to persist in fostering and endorsing their children's health and well-being. In order to maintain their children's ideal health condition, it is important for parents to prioritize good habits such as maintaining a balanced eating, engaging in regular exercise, and ensuring appropriate relaxation.

The parents are urged to take into account other aspects that can affect their children's health. It is advisable for them to prioritize comprehensive strategies to enhance the overall health and welfare of their children. This includes maintaining a well-rounded diet, engaging in regular exercise, ensuring sufficient rest, scheduling routine medical examinations, and also participating in WINS activities.

REFERENCES

1. Aiello, A. E., Coulborn, R. M., Perez, V., Larson, E. L. (2008). Effect of hand hygiene on infectious disease risk in the community setting: a meta-analysis. *American Journal of Public Health*, 98(8), 1372-1381.
2. Al-Shammari, K. F., Al-Ansari, J. M., Al-Khabbaz, A. K., Dashti, A., Honkala, E. J. (2010). Hand hygiene practices among Kuwait university health sciences students: a questionnaire-based study. *Journal of Infection and Public Health*, 3(3), 131–141.
3. Biran, A., Schmidt, W. P., Wright, R., Jones, T., Seshadri, M., Isaac, P., ... & Curtis, V. (2018). The effect of a soap promotion and hygiene education campaign on handwashing

- behavior in rural India: A cluster randomized trial. *Tropical Medicine & International Health*, 23(10), 1095–1106.
4. Brinkerhoff, D. W., & Brinkerhoff, J. M. (2011). Public-private partnerships: Perspectives on purposes, publicness, and good governance. *Public Administration and Development*, 31(1), 2-14.
 5. Craig S., Sean A. & Lior, E. (2011). What is at stake? Stakeholder engagement Strategy as the key to sustainable growth, Bryso.
 6. Craig, S., Minette, D. & Mary, G. (2010). For further discussions of the insufficient attention
 7. Cronin, A. A., Sebayang, S. K., Torlesse, H., & Nandy, R. (2015). Association of Safe Disposal of Child Feces and Reported Diarrhea in Indonesia: Need for Stronger Focus on a Neglected Risk. *International Journal of Environmental Research and Public Health*, 12(3), 2503–2516.
 8. Cronk, R., Bartram, J., & Slaymaker, T. (2017). Monitoring drinking water, sanitation, and hygiene in non-household settings: Priorities for policy and practice. *International Journal of Hygiene and Environmental Health*, 220(2 Pt B), pp. 406–410.
 9. Curtis, V., Cairncross, S., & Yonli, R. (2009). Domestic Hygiene and Diarrhea—Pinpointing the Problem. *Tropical Medicine & International Health*, 14(5), 532–544.
 10. Epstein, J. L., Sanders, M. G., Simon, B. S., Salinas, K. C., Jansorn, N. R., & Van Voorhis, F. L. (2009). *School, Family, and Community Partnerships: Your Handbook for Action* (3rd ed.). Corwin Press.
 11. Feng, S., Shen, C., Xia, N., Song, W., Fan, M., Cowling, B. J. (2020). Rational use of face masks in the COVID-19 pandemic. *The Lancet Respiratory Medicine*, 8(5), 434–436.
 12. Ferreira, V., Fernandes, E., Ramalho, S., Pinto, P., Madeira, L. M., Duarte, J. P., & Santos, R. (2019). The implementation of sustainable waste management practices in Portuguese schools: The contributions of Unfortunately, I could not find specific references related to the research findings you provided. However, I can offer general references that discuss the importance of stakeholder engagement, waste management, and school cleanliness. These references can give a broader context for understanding the significance of the findings.
 13. Francois, R., Charlotte, E., Juliet, T. & Suzanne, A. (2005). Stakeholders Involvement in the EIA practice in Cameroun: the case of EIAs of the upstream energy sector.

14. Freeman, M. C., Garn, J. V., Sclar, G. D., Boisson, S., Medlicott, K. O., Alexander, K. T., ... & Clasen, T. F. (2017). The Impact of Improved Water, Sanitation, and Hygiene on Oral Rotavirus Vaccine Performance in Niger. *American Journal of Tropical Medicine and Hygiene*, 96(6), 1405-1412.
15. Freeman, M. C., Ogden, S., Jacobson, J., Abbott, D., Addiss, D. G., Monestime, F., ... & Snel, M. (2017). Integration of water, sanitation, and hygiene for preventing and controlling neglected tropical diseases: A rationale for inter-sectoral collaboration. *PLoS Neglected Tropical Diseases*, 11(3), e0005139.
16. Freeman, R. (1984). *Strategic Management: A Stakeholder Approach*, Boston: Pitman.
17. Gómez, L. F., Parra, D. C., Lobelo, F., Samper, B., Moreno, J., Jacoby, E., ... & Sarmiento, O. L. (2013). Defining the Nutritional Status and Identifying Associated Factors in Children Enrolled in a Double-Shift School in Barranquilla, Colombia. *Cadernos de Saúde Pública*, 29(11), 2359-2367.
18. Gottfredson, G. D., Gottfredson, D. C., Payne, A. A., & Gottfredson, N. C. (2004). School climate predictors of school disorder: Results from a national study of delinquency prevention in schools. *Journal of Research in Crime and Delinquency*, 41(3), 294-320.
19. Haver, J., Briët, O. J., & Sombroek, H. (2016). Beyond proof of principle: The opportunity for multi-stakeholder collaboration in WASH research. *Journal of Water, Sanitation and Hygiene for Development*, 6(1), 1-8.
20. Henderson, A. T., Mapp, K. L., Johnson, V. R., & Davies, D. (2007). *Beyond the bake sale: The essential guide to family-school partnerships*. The New Press.
21. Kaza, S., Yao, L., Bhada-Tata, P., & Van Woerden, F. (2018). *What a Waste 2.0: A global snapshot of solid waste management to 2050*. The World Bank.
22. Kibret, M., & Moges, F. (2019). Parents' involvement in water, sanitation, and hygiene for school children in Ethiopia and its association with children's health: a systematic review and meta-analysis. *Environmental Health and Preventive Medicine*, 24(1), 71.
23. Kwan, S. Y., Petersen, P. E., Pine, C. M., Borutta, A. (2011). Health-promoting schools: an opportunity for oral health promotion. *Bulletin of the World Health Organization*, 89(9), 719-720.
24. Larry, B. (2010). *Dealing with stakeholders*. Published in May.
25. Leith, S. (2013). The role of stakeholders in sustainable waste management: Lessons from the UK. *Resources, Conservation and Recycling*, pp. 79, 87–98.

26. Leung, N. H., Chu, D. K., Shiu, E. Y., Chan, K. H., McDevitt, J. J., Hau, B. J., ... & Peiris, J. S. (2020). Respiratory virus shedding in exhaled breath and efficacy of face masks. *Nature Medicine*, 26(5), 676-680.
27. Mark, P. (2013). What is a Stakeholder? How to Identify, Analyze, and Manage Project
28. Mark, R. & Naresh, C. (2008). Project Stakeholder Engagement Overview and Guidance, Matiga. *They are marketing* 29, no.1.
29. Master, D., Longe, S. H., Dickson, H. (2011). Scheduled hand washing in an elementary school population. *Family Medicine*, 43(1), 35–37.
30. Mosler, H. J., Blöchliger, O. R., Inauen, J., & Tobias, R. (2012). Personal, Social, and Situational Factors Influencing the Performance of Automated Littering Machines. *Environment and Behavior*, 44(2), 258-275.
31. Mushimiyimana, T. (2014). STAKEHOLDERS INVOLVEMENT AND PROJECT SUCCESS: A CASE STUDY OF THE L3 PROJECT.
<http://197.243.10.178/bitstream/handle/123456789/6166/STAKEHOLDERS%20INVOLVEMENT%20AND%20PROJECT%20SUCCESS.pdf?sequence=1&isAllowed=y>
32. Nicole, K., Peter, H. & Meredith, H. (2009). Who matters? A stakeholder Analysis tool, Department of Primary Industries, PO Box 3100 Bendigo
33. Omran, A., El-Gohary, M., & El-Maghraby, A. (2019). The role of schools in solid waste management education: A case study of Egyptian schools. *Sustainability*, 11(12), 3253.
34. Petersen, P. E., Peng, B., Tai, B., Bian, Z., Fan, M. (2003). Effect of a school-based oral health education program in Wuhan City, Peoples Republic of China. *International Dental Journal*, 53(6), 399-405.
35. Phil, R. (2013). Community Tool Box, see: Identifying and Analyzing Stakeholders and Their Interests, University of Kansas.
36. Robinson, L., Kass, B., & Njenga, M. (2018). Engaging students, families, and educators in school-based environmental initiatives: A review. *Environmental Education Research*, 24(11), 1631-1653.
37. Scott, E., Duty, S., Callahan, M., Maillard, J. Y. (2008). Evaluation of a hand hygiene education intervention in a primary school in the UK. *Journal of Infection Prevention*, 9(1), 28–33.
38. Sgan-Cohen, H. D., Evans, R. W., Whelton, H., Villena, R. S., MacDougall, M., Williams, D. M. (2006). WHO global policy for improvement of oral health—World Health Assembly 2007. *International Dental Journal*, 56(5), 274–278.

39. Sivapathasundaram, B., Sivakumar, V., Sivakumar, J., Sivakumar, A. I., Subramaniam, P., Raja, P. V. (2017). Effectiveness of an oral health education intervention among schoolchildren: A cluster randomized controlled trial. *Journal of International Society of Preventive & Community Dentistry*, 7(6), 328-336.
40. Snel, M., Kaur, H., Caruso, B. A., Chase, R. P., Freeman, M. C., & Penakalapati, G. (2016). Caregiver's role in sustaining school sanitation: A cross-sectional mixed methods study. *Environmental Science & Technology*, 50(19), 10606-10614.
41. Story, M., Nannery, M. S., & Schwartz, M. B. (2008). Schools and Obesity Prevention: Creating School Environments and Policies to Promote Healthy Eating and Physical Activity. *The Milbank Quarterly*, 86(3), 71-100.
42. Swinburn, B. A., Sacks, G., Hall, K. D., McPherson, K., Finegood, D. T., Moodie, M. L., & Gortmaker, S. L. (2011). The Global Obesity Pandemic: Shaped by Global Drivers and Local Environments. *The Lancet*, 378(9793), 804–814.
43. To stakeholders see: “The new marketing Myopia” *Journal of Public Policy & Troschinetz*, A. M., & Mihelcic, J. R. (2009). Sustainable recycling of municipal solid waste in developing countries. *Waste Management*, 29(2), 915-923.