



SOLID WASTE MANAGEMENT AWARENESS AND PRACTICES AMONG ZONE 2 HIGHER EDUCATION INSTITUTION IN ZAMBALES

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ABSTRACT

The study aimed to determine the respondent's Solid Waste Management Awareness and Practices among Zone 2 Higher Education Institution (HEI) of Zambales.

The study also sought to determine the profile of the respondents in terms of school classification and school level, and the different solid waste management practices as to segregation, waste reduction, waste recycling and reuse and waste disposal and the level of awareness to solid waste management.

The survey questionnaire was used as the main data-gathering instrument for this study. The respondents were six hundred twelve teacher and student respondents. The descriptive method of research was used.

The researcher employed various data gathering procedures such as observations, the use of questionnaire, and pure research in gathering data. Various statistical measurements were used such as frequency distribution, percentage distribution, weighted mean and Pearson-r.

Findings revealed that out of the six hundred twelve respondents, the respondents came from public-university level higher education institution. The respondents answered "strongly agree" on the solid waste management practices in segregation however, they answered "agree" in terms of waste reduction, waste recycling and reuse and waste disposal and aware of the different solid waste management practices. The respondents agreed that there is a significant relationship between the awareness of the students and their practices on solid waste management.

INTRODUCTION

Study Background

Degradation of the environment is a major issue today. The urge to safeguard our environment has trumped all other considerations (Michael, 2014). As a result, solid waste management is a problem in both developed and developing countries. A major environmental challenge in cities nowadays is the generation of municipal solid waste (MSW) (Pattnaik & Reddy, 2010).

Management of solid waste comprised waste collection, transport, disposal, and treatment. It fosters economic growth and a better quality of life by reducing or eliminating harmful environmental and health consequences. In today's contaminated environment, knowing how to properly dispose of waste is crucial (Marello and Helwege, 2014).

Solid waste management requires community education to build a good program. Awareness of solid waste management will change people's attitudes regarding trash. Waste is garbage, and it should not be touched or approached. They used to think all rubbish should go into one container (Sarino, 2014).

Specifically, the National Environmental Awareness and Education Act of 2008 mandated that the CHED and TESDA incorporate environmental education into the National Service Training Program under Republic Act No. 9163, as part of the Civic Welfare Training Service component required for all baccalaureate degree and vocational programs with a curriculum of at least two years.

A continuous education and information campaign on solid waste management should be conducted by the national government, in collaboration with the Department of Education (DepEd), Technical Education and Skill Development Authority (TESDA), Commission on Higher Education (CHED), and Philippine Information Agency (PIA).

Zambales is a progressive province with a peaceful, clean, and eco-friendly culture. The law mandates that schools in the province initiate initiatives and good answers to environmental concerns. However, as shown, diverse student activities constantly generate a huge amount of waste. So the researcher did a second study to analyze “waste management knowledge and practices in higher education institutions in Zone 2, Zambales” to help improve waste management systems in schools and avoid major environmental effects of poor waste management. The researcher can help the community by sharing and utilizing the study's findings.

Problem Statement

The study aims to find out respondents' Solid Waste Management Awareness and Practices in Zambales Zone 2. The research intended to answer the following questions.

1. How is respondents’ profile be described in terms of the following:
 - 1.1 School Classification and
 - 1.2 School Level?
2. How is the respondents practices on Solid Waste Management be described in terms of:
 - 2.1 Segregation;
 - 2.2 Waste Reduction;
 - 2.3 Waste recycling and Reuse
 - 2.4 Waste Disposal?
3. What is the level of awareness of the respondents on the solid waste management practices?
4. Is there a significant relationship between the awareness of the students and their practices on solid waste management?
5. What are the programs that may enhance the respondent’s awareness and practices on Solid Waste Management?

Framework/Theory

SWM is a solid waste management planning framework. ISWM stands for Integrated Solid Waste Management. An effective ISWM system examines how to reduce, recycle, and manage solid waste to protect human and environmental health. Integrated Solid Waste Management uses local demands and conditions to identify and combine the most appropriate waste management strategies. The major Integrated Solid Waste Management operations include waste prevention, recycling and composting, and landfill design, construction, and management.

Solid waste management is one of the world's greatest development challenges. Not only does poor solid waste management damage the environment and health, but it also inhibits the nation's progress towards Sustainable Development (SD). Schools are among the major garbage generators in any city or country. Paper makes up at least 40% of the normal school trash stream. Thus, more comprehensive solid waste management solutions within development processes are required. Solid waste management must be improved for Sustainable Development. This study's conceptual topics will address waste segregation, reduction, recycling, reuse, and disposal behaviors of higher education institution students and workers. A school policy on solid waste management and a program for solid waste management require student and staff involvement in identifying problems and planning solutions.

The input-process-output design is separated into three frameworks in this study.

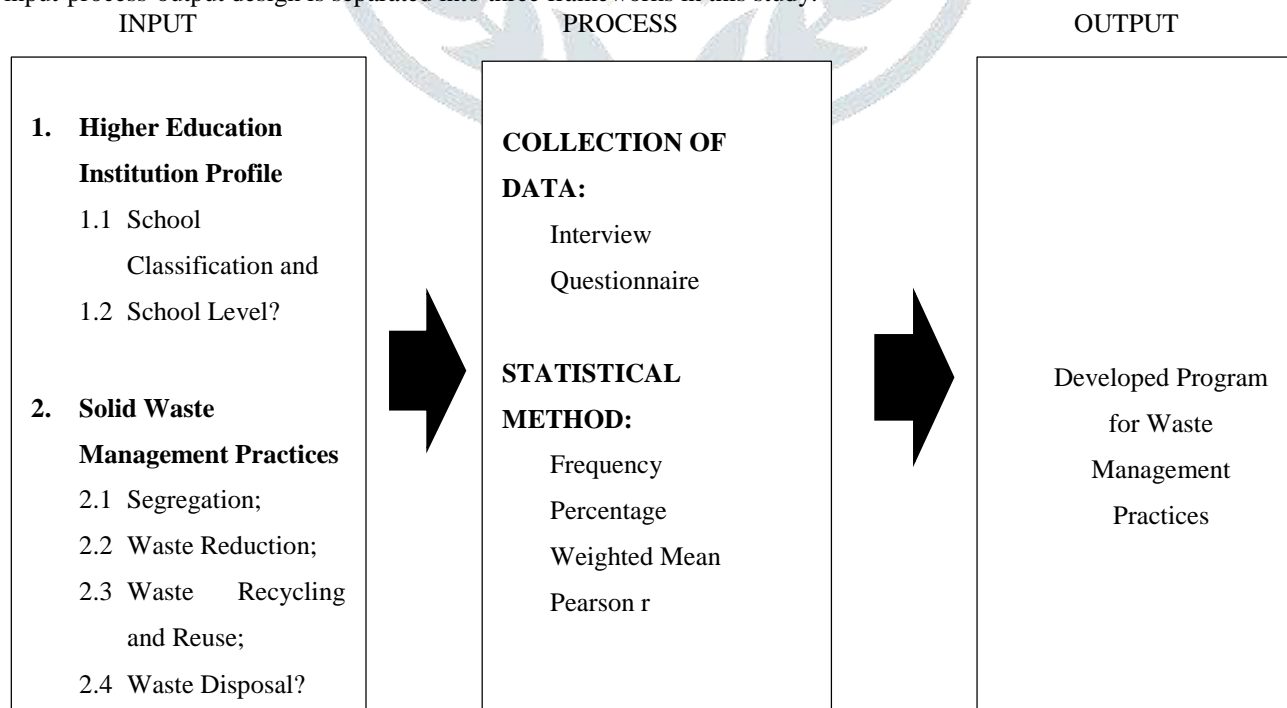


Figure 1: Study Paradigm

Figure 1 shows the study's paradigm, which contains the HEI's profile.

For each school level, the first frame contains the Higher Education Institution Profile. Segregation, Waste Reduction, Reuse and Recycling, and Disposal are the waste management parameters.

The second frame depicts the study's data collection method using interviews and questionnaires. These include Frequency, Percentage, Weighted Mean and Pearson-r.

The final frame covers the study's product, which is Solid Waste Management Practices among Zone 2 Higher Education Institutions and a constructed and designed waste management program.

Hypothesis

The study's hypothesis is as follows.

1. There is no substantial association between student awareness and solid waste management practices.

Research Design

This study employed the descriptive approach to verify hypotheses relating to the current situation in order to clarify it.

"Gathering facts about the current existent condition," said Creswell (1994). According to Creswell, the descriptive methodology is rapid and practical financially (1994). Because this method is adaptable, it can also be utilized to investigate new problems and questions that arise during the study.

Descriptive research, on the other hand, focuses on explaining the existing situation and the facts involved. This strategy is used to describe the current state of a situation and to research the causes of a certain phenomenon. Descriptive research seeks to establish a detailed profile of the subjects being examined.

Respondents and Location

The survey included 385 students and 226 faculty members from higher education institutions in Zone 2 of Zambales.

Table 1
Distribution of Respondents of Higher Education Institution
According School

School	Students' Population	Distribution of Students-Respondents	Teachers' Population	Distribution of Teacher-Respondents
MACSAT	600	22	25	13
PRMSU - Iba	7,336	271	319	161
PRMSU - Botolan	479	18	28	14
PCB	1,293	48	52	26
LYCEUM	699	26	25	13
Total	10,407	385	479	226

As shown in the table above, using slovin's formula with 5 percent margin error the total student-respondents is 385 and the total teacher-respondents is 226 of 479 teachers.

Instruments

This study's main data collection tool is a researcher-made survey questionnaire. A questionnaire is a combination of queries and other questions designed to collect data from respondents. Questionnaires are more cost effective than other research instruments and frequently feature uniform answers, making data collection easier.

The questionnaire has two parts. It asked about a school's classification, level, total number of students, professors, and staff.

The Likert Scale was used to assess waste management methods such as segregation, waste reduction, reuse and recycling.

The researcher administered the study's questionnaire to non-participants to assess its validity. After the questions were answered, the researcher asked for ideas or modifications to ensure the instrument's further improvement and validity. The researcher altered the survey questionnaire based on feedback. The research adviser and defense panel verified the questionnaire for validity and correctness. The validated instrument was ran through a dry run and tested for reliability using Cronbach's alpha.

Receipt

After instrument validation, the researcher requested permission from the Zambales Schools Division Superintendent to distribute questionnaires to public elementary schools.

The researcher then notified the respective school heads to distribute the questionnaires. The study's aims were explained to the chosen respondents to ensure accuracy of data and answers. The researcher ensures 100% retrieval of the questionnaires.

This study collected two categories of data. Among these were primary and secondary data. The basic data came from the survey responses. Secondary data came from relevant published papers and literatures. This study employed a survey questionnaire and published literature to conduct both quantitative and qualitative research. Using a combination of quantitative and qualitative approaches, the researcher was able to overcome both methodologies' limitations. Purposive sampling was employed to choose the samples. Purposive sampling is a subset of non-probability sampling. Purposive sampling, also known as judgmental, selective, or subjective sampling, relies on the researcher's judgment when selecting the units to be investigated. Compared to probability sampling, the sample size is usually fairly small.

RESULTS AND DISCUSSION

This chapter summarizes the findings and their interpretation based on collected data, linked literature and studies, and the researcher's own observations and experiences.

Table 2
Frequency and Percentage Distribution of the Respondents' Profile

School Classification	Teacher	Student	Percent
Public	199	338	87.91
Private	27	47	12.09
Total	226	385	100.00
School Level	Teacher	Student	Percent
College	55	93	24.18
University	171	292	75.82
Total	226	385	100.00

School Profile Classification. Table 2 reveals that 338 responses (87.91%) are from public higher education institutions, with 199 teachers and 338 students, and 47 (12.09%) from private higher education institutions, with 27 teachers and 47 students. As shown in the table, most respondents were from public universities.

HEIs are either classified as a college or a university, and either public or private, and also either secular or religious. As of 2019, the country had 1,963 HEIs. (Except state university and college satellite campuses.) This figure includes 242 state HEIs and 1,721 private HEIs (Commission on Higher Education, 2019). As shown in Table 2, 148 (24.18%) of respondents were from a college level higher education institution, with 55 being teachers and 93 being students, whereas 464 (75.82%) were from a university level higher education institution, with 171 being teachers and 292 being students. As shown in the table, most respondents were from universities.

Nursing, hotel and restaurant management, and computer technology are just a few examples of specialty courses offered by colleges in the Philippines. To be classified as a university, state universities and colleges, CHED-supervised higher education institutions, private higher education institutions, and community colleges must meet the standards outlined in CMO 48 s.1996.

2. Solid Waste Management

2.1 Segregation

Table 3
Solid Waste Management Practices as to Segregation

Segregation	Weighted Mean	Qualitative Rating	Rank
1. I separate biodegradable (paper, banana peels, cardboard, and vegetables) and non-biodegradable (plastic toys, glass, steel, rubber) wastes at school.	3.41	Strongly Agree	8
2. I separate recyclable wastes (paper, cardboard, plastic bottles) from non-recyclable (food wastes, leaves, twigs) wastes at school.	3.42	Strongly Agree	5.5
3. I separate non-harmful wastes from toxic and hazardous wastes such as pentel pens, laboratory chemicals, ink, cell batteries and others.	3.45	Strongly Agree	1.5
4. I mix all the garbage in one garbage container.	3.45	Strongly Agree	1.5
5. I segregate recyclable items for collection.	3.41	Strongly Agree	8
6. I am reading the waste bin label before throwing garbage.	3.44	Strongly Agree	3
7. I observe the proper waste segregation.	2.00	Disagree	10
8. I only practice proper segregation if someone remind me or ask me to do it.	3.42	Strongly Agree	5.5
9. I practice proper waste segregation in school like the way we are practicing at home.	3.43	Strongly Agree	4
10. I practice proper waste segregation to serve as a model for others and to influence others.	3.41	Strongly Agree	8
Overall Weighted mean	3.28	Strongly Agree	

The respondents ranked "Strongly Agreed" on indicators 3 and 4, "I separate non-harmful wastes from toxic and hazardous wastes such as pentel pens, laboratory chemicals, ink, cell batteries and others." and "I mix all garbage in one garbage container." with a mean of 3.45 and ranked 1st.

The results show that the pupils are highly aware of trash management and have a positive attitude towards it. Despite their knowledge and attitudes, the respondents rarely exercise and practice proper waste management.

Indicator 7, "I observe proper trash segregation.", placed 10th, had the lowest mean value of 2.00, translated as "Disagree". Despite agreeing on good goals that could help the school's waste management system, the respondents do not always put what they know into action.

For solid waste management, the calculated mean was 3.28, with a qualitative interpretation of "Strongly Agreed". This highlights the majority of respondents' solid waste segregation.

Culaste et al (2018) observed that while respondents have knowledge of and support waste segregation measures, there is still a considerable gap in their attitudes and practices regarding waste segregation.

2.2 Waste Reduction

Table 4
Solid Waste Management Practices as to Waste Reduction

Waste Reduction	Weighted Mean	Qualitative Rating	Rank
1. I borrow, share, and/or rent things that are needed occasionally.	3.34	Strongly Agree	2
2. I buy only what I need so that I will not end up throwing away extra food.	3.42	Strongly Agree	1
3. I always bring packed lunch in reusable lunchbox.	3.15	Agree	6
4. I bring water in reusable water containers.	3.21	Agree	5
5. I am cautious and responsible to every waste I produced.	3.33	Strongly Agree	3
6. I bring containers for food & bought	3.12	Agree	7
7. I bring reusable bags or basket whenever I go to market.	3.11	Agree	8
8. It is more comfortable for me to use available plastics from the vendor.	2.98	Agree	9
9. It's awkward to bring container when buying cook food for takeout.	2.60	Agree	10
10. I practice zero-waste initiative to help reduce waste production.	3.22	Agree	4
Overall Weighted mean	3.15	Agree	

Table 4 shows Waste Reduction Solid Waste Management Practices. The respondents rated “Strongly Agreed” on all factors, especially 2 “I buy only what I need so I don't waste food.” with a mean score of 3.42 and ranked 1st. This study shows that students save waste by just buying food they need. Indicator 9, “It's awkward to bring container when buying cook food for takeout.” ranked 10th. Overall, the calculated mean for solid waste management replies was 3.15, with a qualitative interpretation of “Agreed”.

Ambayic et al. (2013) define reduction as deliberately acquiring goods that produce less garbage. It helps schools reduce waste while teaching youngsters appropriate trash management.

2.3 Reuse and Recycling

Table 5
Solid Waste Management Practices as to Waste Recycling and Reuse

Waste recycling and Reuse	Weighted Mean	Qualitative Rating	Rank
1. I convert or redesign waste materials into a new product.	3.24	Agree	6
2. I make decors out of plastic wrappers and other colorful waste materials.	3.20	Agree	8
3. I ignore the importance of recycling.	1.98	Disagree	10
4. I initiate generating-income out of waste materials	3.18	Agree	9
5. I re-used plastic bottle container as long as it is still reusable.	3.30	Strongly Agree	4.5
6. I reuse my old materials than buying a new one.	3.30	Strongly Agree	4.5
7. I keep those unfilled papers and used it as scratch.	3.36	Strongly Agree	1
8. I reuse grocery bags.	3.35	Strongly Agree	2.5
9. I reuse washable food containers.	3.35	Strongly Agree	2.5
10. I reuse scrap paper into memo pads.	3.23	Agree	7
Overall Weighted mean	3.15	Agree	

Table 5: Waste Management Practices for Recycling and Reuse. Indication 8 “I reuse grocery bags.” and indicator 9 “I reuse washable food containers.” both have weighted means of 3.35 and rank 2.5th, respectively. The three indicators suggest that the respondents are recycling and reusing garbage. It has a weighted mean of 1.98, is placed 10th, and has a qualitative grade of “Disagree”. This suggests that respondents believe trash reduction is equally important as recycling in achieving sustainable waste management.

Variable waste reduction weighted total mean 3.15 This signifies that respondent agree (A) with various waste recycling and reuse strategies.

According to Bator et al. (2011), Waterloo University Environmental Studies students appear to lack awareness of recycling. We thought that all students at the University of Waterloo are similarly knowledgeable of recycling methods because the college students are more ecologically sensitive. Diverse educational sources should be utilized to broaden campus awareness. Ferrer (2015) conducted a survey on 300 college students from Pamantasan ng Lungsod ng Maynila, a chartered institution in the Philippines,

about reduce, reuse, and recycle practices. He claims that students' recycling habits are independent of their profiles. Ferrer suggests that regardless of the profile, all pupils should be taught to reduce, reuse, and recycle.

2.4 Disposal

Table 6
Solid Waste Management Practices as to Waste Disposal

Waste Disposal	Weighted Mean	Qualitative Rating	Rank
1. I dispose hazardous/toxic/special wastes such as laboratory leftover (chemicals) or electronic waste in any garbage container.	3.23	Agree	4
2. I throw my waste anywhere as long as no one see me.	1.89	Disagree	9
3. I practice waste recycling and re-use for recyclable and reusable materials than immediate waste disposal.	3.27	Strongly Agree	2
4. I use aerobic and anaerobic composting for biodegradable waste.	3.13	Agree	6
5. I practice the separation of wet waste and dry waste disposal.	3.29	Strongly Agree	1
6. I throw waste materials in common open dumps.	2.81	Agree	7
7. I dispose biodegradable wastes into a compost pit.	3.15	Agree	5
8. I burn waste materials.	2.31	Disagree	8
9. I throw and left my garbage anywhere.	1.72	Strongly Disagree	10
10. I agree if there will be a sanitary landfill in the nearby area for waste disposal and processing.	3.26	Strongly Agree	3
Overall Weighted Mean	2.81	Agree	

Table 6: Disposal Solid Waste Management Practices. The respondents rated "Strongly Agreed" on indicators 5, 3, and 10, with the highest mean value of 3.29 and ranked 1st, 2nd, and 3rd respectively. Overall, the calculated mean for solid waste management was 2.81, with a qualitative meaning of "Agree".

This suggests that responders only sometimes manage trash. The results show that the respondents do not always and completely practice waste management.

Parocha, Esguerra, & Hular (2015) found that students in grades one to three do not segregate their garbage. Similarly, despite their awareness of the subject, college students do not practice proper garbage disposal (Madrigal and Oracion, 2018). Students moderately practice effective garbage disposal from Paghasian's work (2017).

2. Solid Waste Management Practices Awareness

Table 7
Level of Awareness on the Solid Waste Management Practices

Awareness on Solid Waste Management	Weighted Mean	Qualitative Rating	Rank
1. I have knowledge about Republic Act 9003 or the Ecological Solid Waste Management Act of 2000.	3.06	Aware	10
2. I am aware of the Solid Waste Management (SWM) Program of the School.	3.15	Aware	7
3. I am familiar on the policies of the school's solid waste management program.	3.16	Aware	6
4. I know the corresponding sanctions of any violations of the Solid Waste Management (SWM) program.	3.09	Aware	9
5. I am properly informed on the purpose of implementing the Solid Waste Management (SWM) program.	3.12	Aware	8
6. I am knowledgeable on possible illnesses that one can get whenever trashes are not properly disposed.	3.31	Fully Aware	4.5
7. I am aware that before throwing garbage, it is a must to read those trash-can labels for segregation.	3.39	Fully Aware	3
8. I can distinguish and identify biodegradable from non-biodegradable.	3.40	Fully Aware	2
9. I am well informed on the importance of recycling.	3.41	Fully Aware	1
10. I practicing waste minimization practices like reuse, recycle and reduce.	3.31	Fully Aware	4.5
Overall Weighted Mean	3.24	Aware	

Table 7 shows the Solid Waste Management Practices Awareness Level. A weighted mean of 3.41 puts indication 9 (I am well versed on the necessity of recycling) first among the 10 indicators with a qualitative rating of “Fully Aware”, followed by indicator 8 (I can separate and identify biodegradable from non-biodegradable) with a mean of 3.40 and rated 2nd.

This demonstrates that respondents understand the necessity of recycling and have a thorough understanding of the various solid waste management strategies. Indicator 9, “I am aware of Republic Act 9003 or the Ecological Solid Trash Management Act of 2000”, placed 10th, shows that some respondents are aware of environmental waste management.

The estimated weighted overall mean for Solid Waste Management Practices Awareness is 3.24. Although respondents are aware of various solid waste management procedures, they are not aware of Republic Act 9003 or the Ecological Solid Waste Management Act of 2000. The findings show that while respondents are aware of the issue of waste management in schools, few are aware that inadequate waste management might harm the environment. Not all waste management practices were followed.

Paghasian (2017) got the same results. Paghasian said college students are well-versed in solid waste disposal. College students can recognize biodegradable and non-biodegradable garbage, but not the RA 9003. Most college students understand the notion of reducing, reusing, and recycling, as well as the proper order to do so (Tiew, Watanabe, Basri, Zain, & Basri, 2013) Students in high school are also aware of garbage segregation, although few are aware of the fines associated with non-compliance. (Troddillo et al., 2018)

It is recommended that for solid waste management programs and advocacy to be more effective, awareness on waste management issues as well as sustainable solutions to these problems should be sought for the integration of the school's educational mi

3. Awareness of Students and their Solid Waste Management Practices

Table 8

Relationship Between Students' Awareness and Practices on Solid Waste Management

Pearson Correlation	0.553**
Sig. (2-tailed)	0.000
N	612
Interpretation	High positive correlation
	Ho is rejected
	Significant
** Correlation is significant at the 0.01 level (2-tailed).	

Table 8 shows the test hypothesis of the Awareness of Students and their Solid Waste Management Practices. Assuming a 0.01 level of significance, the Pearson correlation coefficient (r) obtained is 0.553, interpreted as “High positive correlation”. Thus, the decision is to reject the null hypothesis (Ho), There is a substantial relationship between student awareness and solid waste management practices.

This means that people who are knowledgeable of waste management are more likely to practice it. Gorman S. and Gorman J. (2018) suggest that people behave a certain way because they are aware of the situation. Aware people will have a good attitude about a subject. Unaware people may have a negative or indifferent opinion towards a field. In terms of waste management, students' awareness affects their attitude because what they know determines how they behave.

A recent study demonstrated that while respondents' knowledge of MSW management is good, their attitudes and actions are neutral or moderate (Laor, Suma, Keawdoungek, Hongtong, Apidechkul, & Pasukphun 2017).

The high level of respondents' awareness and attitude towards SWM can positively influence their practices of solid waste disposal at home and at school, according to Madrigal and Oracion (2018). Noting that solid waste disposal procedures do not match the respondents' high level of awareness, they concluded that while knowledge and attitude may influence environmental behavior, they must also be connected with the potential benefits of participating in environmental activities.

Laor (2018) finds that one's knowledge about a subject affects one's attitude towards it. Several factors influence waste management attitudes, including education, according to their research. Less educated people have a more negative outlook than educated people (Laor, Suma, Keawdoungek, Hongtong, Apidechkul, & Pasukphun 2017).

5. Project CLEAN is a program that enhances the respondent's awareness and practices on Solid Waste Management.

WASTE MANAGEMENT PROGRAM

- I. TITLE:** Project CLEAN “Creating Learning Environment Astounding and Nurturing”
- II. PROPONENT:** Mark Anthony R. Gantang
- III. PROPOSED DATE:** Year Round
- IV. PROPOSED VENUE:** Zone 2, Zambales
- V. RATIONALE**

With the current pandemic situation, maintaining the public health is a vital concern. The Project CLEAN (Creating Learning Environment Astounding and Nurturing) maintains and promotes student's health and wellness to sustain child's learning and ability to stay in school.

In support to the Project CLEAN of the school, provision of a functional waste management program is vital. Thus, the project will safeguard the school personnel and students from the transmission of the Corona Virus and promotes positive waste management practices.

VI. OBJECTIVES

The project aims to:

1. maintain clean and healthy learning environment by practicing proper waste management;
2. create opportunities for schools to practice proper solid waste management in schools and their wider communities; and
3. develop awareness and fostering positive solid waste management practices in school children in their schools, homes and communities.

VII. MATRIX OF ACTIVITY

Activities	Objectives	Strategies	Timeline
➤ Intensifying School's SWM Program	➤ To promote environmental education and increase awareness on the garbage situation and challenges of solid waste management in school.	<ul style="list-style-type: none"> ➤ Creation of the SWM Team that facilitate the SWM concerns of the school ➤ Election of SWM Coordinator or SDRRM Coordinator that will overlook the program. ➤ Integrate the importance of the SWMP and environment friendly practices in the curriculum and co-curricular activities through working with the subject teachers and club moderators. 	➤ First month of the School Year
➤ Promoting waste segregation	<ul style="list-style-type: none"> ➤ To separately store recyclable material for reuse ➤ To ensure that waste which can be processed for recovery of material and energy does not become co-mixed with undesirable elements ➤ To separately store hazardous waste for disposal in hazardous waste landfills or for appropriate processing 	<ul style="list-style-type: none"> ➤ Provision of Trash bins with labels to promote waste segregation practices ➤ Develop a waste collection strategy in classroom like "no segregation, no collection" 	➤ 2 nd to third month of the school year
➤ Minimal-waste to zero-waste habit	➤ To minimize the waste and ensure reduction in landfill space for final disposal.	<ul style="list-style-type: none"> ➤ Promote "Bring Your Own Container" practice ➤ Make a brochure or a poster promoting zero-waste campaign ➤ Sustain earth friendly habits and practices while in school, off-campus activities and at home 	➤ Year round
➤ Institutionalizing Waste recycling and reuse activities.	➤ To reduce quantities of solid waste, as the general waste is separated and follows the municipal waste stream	<ul style="list-style-type: none"> ➤ Record Trash Bags Reports. ➤ Construction of Materials Recovery Facility 	➤ Year round
➤ Instilling proper waste disposal practice	➤ To addresses the disposal of regulated and non-regulated	➤ Information dissemination on how to dispose and	➤ Year round

	waste generated and disposed by the school ➤ To guide on the process to determine the storage and disposal requirements of all waste generated on campus	➤ where to dispose garbage's generated by the school ➤ Outline waste minimization and recycle program, training employees on managing hazardous waste, establishing contingency plans, and regulatory report requirements.	
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VIII. EXPECTED OUTPUT

- Provision of a functional Solid Waste Management program.

Conclusions

From the aforementioned findings, the conclusions which are binding on the respondents arrived at:

1. The respondents came from public-university level higher education institution.
2. The respondents answered “strongly agree” on the solid waste management practices in segregation however, they answered “agree” in terms of waste reduction, waste recycling and reuse and waste disposal.
3. The respondents are aware of the different solid waste management practices.
4. There is a significant relationship between the awareness of the students and their practices on solid waste management.
5. The results revealed that the respondents have a knowledge on various practices of waste management and to sustain progress and strengthen the knowledge of the student respondents a program where developed.

Recommendations

Based on the summary of the investigations and the conclusions arrived at, the researcher has offered the following recommendations:

1. The level of respondents' awareness on Solid Waste Management (SWM) Practices are high and great according to all areas. It is therefore recommended that educational institutions should focus on conduct information campaign on proper waste segregation and start on practicing waste reduction by starting to bring own container when buying to reduce production of additional waste.
2. The school and community should also promote environmental awareness and start growing awareness on Solid Waste Management (SWM) Practices by emphasizing the importance of waste recycling and proper waste disposal.
3. The teachers should continuously remind students regarding proper waste management practices and keep the students well-informed on Republic Act 9003 or the Ecological Solid Waste Management Act of 2000.
4. A follow up studies along this line may be conducted in a wider perspective to see the consistency of the study and that other researchers to contribute new ideas and insights about the topic.
5. The waste management program “project CLEAN” may be use as a basis for implementing program related to waste management practices.

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