Towards the Development of a Framework on School Management and Practices for the Implementation of an Ecological Waste Management Program

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Abstract

The Ecological Waste Management program in every school in Antipolo City has been implemented by the city government through constructing the Material Recovery Facility in each school. This program aims to reduce the school waste and only residual waste will be thrown and be collected by the dump truck. This study used a qualitative case study to be specific. This case study method that the researcher selected examined contemporary events that involved behaviors of the teachers, students, non-faculty staff, school head and canteen personnel that cannot be manipulated. The PPSA framework and four emerged themes from the data after cross -case analysis included Proper Solid Waste Segregation and Avoidance (PSWSA), Proper communication, cooperation and coordination (PCCC), Systematic administration of the program (SAP), Adapt Ecological Waste Training and Promotion (AEWTP). The study revealed the common management and practices of the schools and why they were recognized and awarded by the city government of Antipolo. The PPSA framework on Ecological Waste Management Program would serve as the pattern for the school to follow. This framework was based on the data gathered from the three schools that were recognized and awarded by the city government.   It was found that before the EWMP program started, tons of wastes were collected from school. The city waste management office of Antipolo alarmed the schools that there will be no dumpsite for the wastes of Antipolo, so they planned a program for each school to have MRF for them to practice the RA 9003 and Executive Order No. 11 Series of 2013.

Keywords: *Waste segregation, MRF (Material Recovery Facility) Waste hierarchy, Ynares Eco-System (YES)*

1. Introduction

The purpose of this case study was to come up a framework from the practices and management of the three schools that were recognized and awarded by the city government.

This study explored the practices and management of the three schools that were recognized and awarded by the city government of Antipolo and it was guided by the following research questions and supported by the sub questions: The research questions were the following:

1.How is the Ecological Waste Management program implemented by the following schools which received awards:
> a.)San Isidro National High School;
> b.)BagongNayon II Elementary School; and
> c.)Nazarene Ville Elementary School?

2. How functional is the school in implementing Ecological Waste Management program in terms of:
> a.) Adaptation;
> b.) Goal attainment;
> c.) Integration; and
> d.) Latent maintenance?

3. What framework can be drawn from the analysis of three schools from their management and practices in implementation of Ecological Waste Management Program?

The practices done by these schools were based on the "Ecological Waste Management Act of 2000" also known as RA 9003 that declared the policy of the state to adopt a systematic, comprehensive and ecological solid waste management program which shall ensure the protection of public health and environment. A school is an organization or a system of consciously coordinated activities (Barnard, 1968).It is understood that schools must exercise and practice the Ecological Waste Management Program (EWMP) to have a systematic management program based from the standard policy of the Philippines.

The constant implementation of waste-handling measures, as well as building appropriate storage and waste storage facilities is important in the community.

Theoretical Framework

The functionalist in the education system showed that the school has an important role in performing positive functions for everyone in the society. It means that everyone feels part of the same culture and there is social solidarity or togetherness.

The school teachers teach children the specific skills, norms, and values they will need for the work place that match the economic needs of society. Education teaches people not only the skills and thinking skills to maximize their potential, but also teaches them to be and get along with other good citizens. At school, individuals learn the diverse skills necessary for this to take place. Parsons' (1999) four system of structural functionalism is enumerated as follows,

1. A - adaptation – a system must cope with external situational exigencies. It must adapt to its environment and adapt the environment to its needs. In Biology, adaptation means a change or the process by which an organism or specie becomes better suited to its environment. This change that the school must adapt is very important. In the past fast few years, schools in Antipolo do not have their own Material Recovery Facility or MRF; all wastes are thrown without doing anything to them.

2. G - goal attainment- a system must define and achieve its primary goals. Defining and achieving goals in a system needs cooperation of everybody inside the system to fully achieve the goals.

3. I - Integration- a system must regulate the interrelationship of its component parts.

4. L - latency (pattern maintenance) - a system must furnish, maintain and renew both the motivation of individuals and the cultural patterns that create and sustain the motivation. In a healthy society, all parts work together to maintain stability, a state called dynamic equilibrium (Parsons, 1961).

2. Methodology

This case study method (Figure1) that the researcher selected examined the contemporary events that involved behaviors of the teachers, students, non-faculty staff, school head and canteen personnel that cannot be manipulated.

An exploratory case study deals with contemporary events and aims to understand real-life phenomena in depth; it is also open in the subject's real world context, which gives a researcher a good view of what he/she really likes.

This research study followed the Creswell's (2013) six steps data analysis process and, although these steps are described in linear order, Creswell described "an interactive practice" to analysis

Step 1: Preparing and organizing the data for analysis p.197 (Creswell, 2014). During this step audiotapes from interviews were transferred into word document transcripts.

Step 2: Read or look at all the data (p.197). This step also aligned with Esterberg's directive to "get to know your data". The researcher reflected on the overall meaning to gain a general sense of the information and ideas that the participants conveyed. It provides a general sense of information Creswell, (2014) in order for the researcher to have a reflection about the ideas of the participants.

Step 3: Using codes to develop description and themes- Coding is the process of organizing the data by bracketing chunks (or text image segments) and writing words representing a category in the margins (p198). The researcher followed Creswell's procedure of organizing the material into segments by taking the text data segmenting sentences into categories. She then labeled those categories with terms based on the actual language of the participants and to the RA 9003 which are also parallel.

Step 4: Use the coding process to generate a description of the setting or people as well as categories or themes for analysis (p.199).She used this process to generate code for the descriptions, which then led to generalizing a small number of categories or themes. Then she analyzed the themes that emerged and gathered the various cases into a general description for this bounded case. It represented the findings through narratives and visuals.

Step 5: Advance how the description and themes were represented in qualitative narrative (p.200). According to Creswell (2013), the most popular approach is to use the narrative passage to convey the findings of the analysis. For this step, the researcher wove the emergent themes into narrative passages so that the findings emerge logically from the participants' responses. The discussion was represented in a qualitative narrative using visuals figures or pictures of the meaning of the findings from a discussion of several themes of the participants.

Step 6: A final step in data analysis involves interpreting the findings and results (p.200). Creswell recognizes that a researcher's own background plays an important part in the meaning making process as a researcher's fidelity to a theoretical lens. During the researcher's own interpretation process, her experience as an MRF coordinator informed her understanding of the participants' stories. Likewise, to convey the participants' practices and experiences accurately, she focused specifically on what they were saying, the conclusions they drew. She also looked into RA 9003 for the similarities and differences of their management and practices. The themes that emerged from this study came directly from RA 9003 since it is the national standard in implementing solid waste management in the Philippines.

Participants Sampling Design and Technique

The researcher chose the respondents who are knowledgeable about waste management such as the MRF coordinator and YES-O adviser. These respondents can give rich information to the researcher about the practices that they have in their school. According to Ms. Daisy A. LumioYnares, Eco-System (YES) adviser of City Environmental Waste Management Office of Antipolo City (CEWMO), out of Fifty three (53) schools in Antipolo City, San Isidro National High School, BagongNayon II Elementary School and Nazarene Ville Elementary School have been selected based on the following criteria:

    a. Good practices in implementing of school MRF
    b."GulayansaPaaralan"
    (Garden at the school)
    c. Urban hanging-gardening
    d. Composting

The above mentioned criteria were based from Executive Order No. 11 series of 2013 section 3.

"The Province of Rizal adheres with the cleaning, greening and recycling program in line with the policy of the National Government to foster the promotion and protection of the global environment to attain sustainable development while recognizing the primary responsibility of local government units to deal with environmental problems"(Executive Order No. 11 series of 2013).

Qualitative inquiry typically focused in depth on relatively small samples, even single cases selected purposefully. The logic and power of purposeful sampling lies in selecting information-rich cases for study in depth, Patton (1990). Purposive sampling is the technique widely used in qualitative research for the identification and selection of information- rich case for the most effective of limited resources (Patton 2002). This involves identifying and selecting individuals or groups that are especially knowledgeable about or experienced in a phenomenon of interest (Creswell & Plano Clark, 2011).

In implementing the Ynares Eco-System Project (YES) in line with the Republic Act 9003 or the Solid Waste Management Act of 2000 schools in Antipolo , one must follow the above criteria. The three schools have been selected because of their highly recommendable practices and received the Environmental Compliance Audit Platinum Award and Manila Bayani Award in 2016.

The researcher used nomination sampling. It helped the researcher look for the right person to become a respondent of the case. These respondents were nominated by the school heads of the selected schools because they had rich-information about the cases in accordance with the following criteria:

a.Material Recovery Facility or (MRF) coordinator of the school
b.Youth for Environment in Schools Organization (YES-O) adviser
c. Person who is knowledgeable in waste management

of the school

The logic of criterion sampling is to review and study all cases that meet some pre-determined criterion of importance. The above mentioned criteria helped the researcher to be sure to understand cases that are likely to be information–rich because they may reveal major system weaknesses that become targets of opportunity for program or system improvement (Patton, 1999).

Another method used was the semi-structured interview. The researcher interviewed informants on the above - mentioned criteria from three schools in Antipolo. In semi structured interview, the researcher is the instrument because he has the potential to influence the collection of empirical materials and conduct with a fairly open framework, which allows for focused, conversational two-way communication that can be used both to give and receive information (Pizalla,2012). Moreover, it is less intrusive to those being interviewed as the semi-structured interview encourages two-way communication.

The researcher asked more open-ended questions that allowed for a discussion with the interviewee rather than a straightforward question and answer format wherein the interviewer prepared lists of general topics to be addressed known as the interview guide. Thus, this tool helped the researcher to come up with best practices for sustainable solid waste management. It did not follow the formalized lists of questions (Dolyle, 2017).Semi-structured interviews were non-standardized and are frequently used in qualitative analysis. The "interviewer does not do the research to test a specific hypothesis" (David, & Sutton, 2004, p. 87).The researcher had a list of key themes, issues, and questions covered. In this type of interview the order of the questions can be changed depending on the direction of the interview. An interview guide was also used, but additional questions were asked.

The order in which the various topics are dealt with and the wording of the questions are left to the interviewer's discretion. Within each topic given by the researcher, the interviewer is free to conduct the conversation as he thinks fit, to ask the questions he deems appropriate in the words he considers best, to give explanation and ask for clarification if the answer is not clear, to prompt the respondent to elucidate further if necessary, and to establish his own style of conversation (Corbetta,2003).

Additional questions were asked and some were questions that have not been anticipated in the beginning of the interview. Notetaking or tape recording documented the interview. This type of interview gave the researcher opportunities to probe for views and opinions of the interviewee. Probing was a way for the interview to explore new paths which were not initially considered (Gray, 2004, p. 217). Having" … key themes and sub-questions in advance lies in giving the researcher a sense of order from which to draw questions from unplanned encounters (David, & Sutton, 2004, p. 87)."

The semi-structured interviews was freer than a structured interview (Kajornboon, 2004) in which the interviewer does not have to adhere to a detailed interview guide. Patton (2002, p. 343) recommends to " … explore, probe, and ask questions that will elucidate and illuminate that particular subject … to build a conversation within a particular subject area, to word questions spontaneously, and to establish a conversational style but with the focus on a particular subject that gas been predetermined.".

Figure 1.   Procedural Framework of this Multiple-Case Study (Yin, 2014)
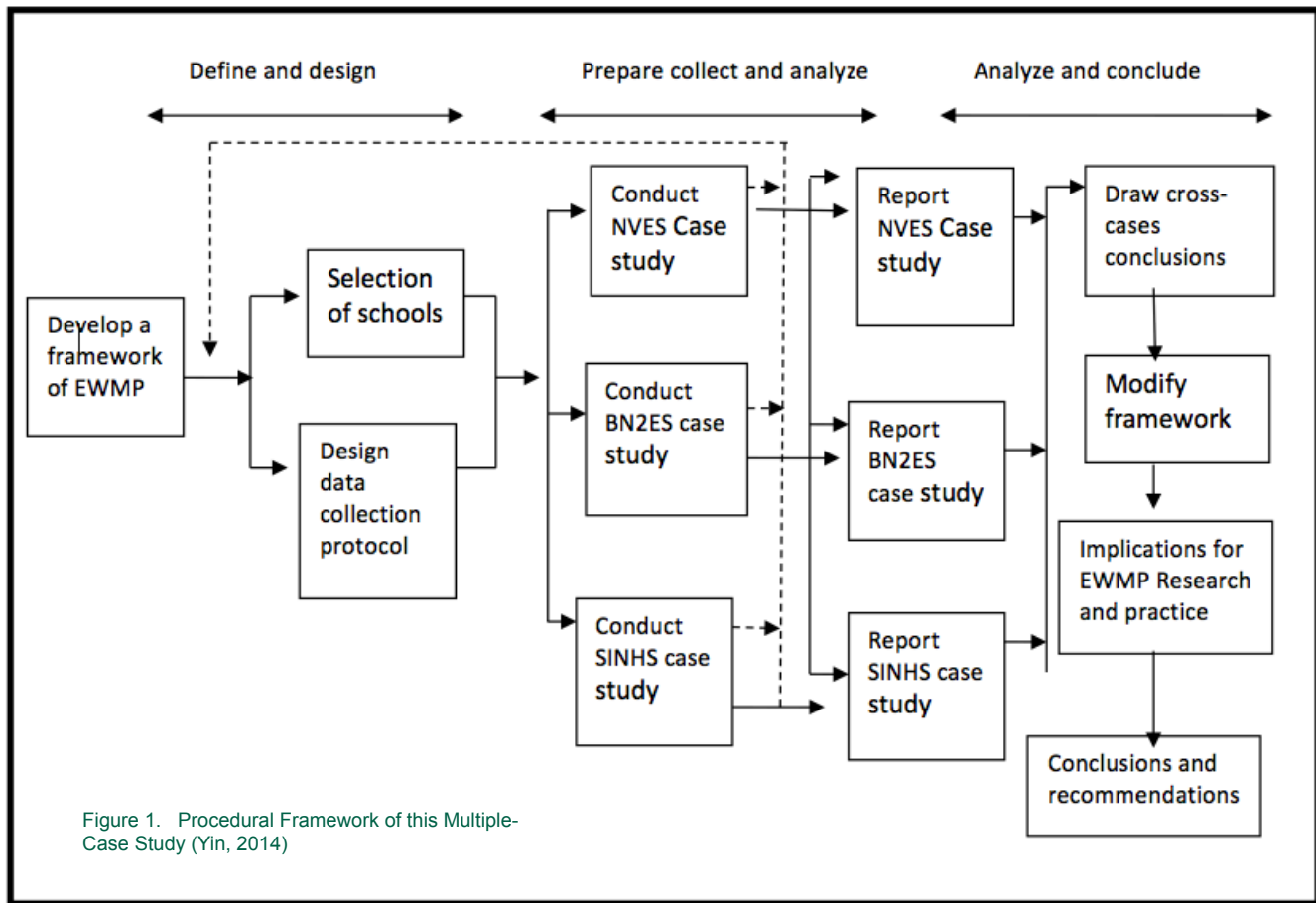
3. Results

The developed framework (Figure 3) was based on cross- case analysis of the findings related to the sub-questions contributing to the broader of the research questions, direct observation of the case in the setting, gathered physical artifacts, and documents which explored the practices and management of the schools that were recognized and awarded by the government. The narrative participants offered rich descriptions of how they practiced and managed the EWMP in the school. The data gathered through observation, documents and artifacts conveyed the practices and management of the school based on RA 9003, YES Program (Executive Order No. s of 2011) and DO 72, s.2003 Establishment of the Youth for Environment in Schools (YES) Organization. The findings suggested that the school practiced these based on the standard policy and as managed by the school personnel. The principal as the overseer of the program supervised the set guidelines by the coordinators and implemented by the teachers toward the students. The findings related to sub questions were explored first.

Sub questions 1, 2 and 3. Can you describe to me how you practice waste segregation in your school? How do the members of the community practice waste segregation? What practices do you have to encourage waste segregation? In exploring these sub questions, similar themes emerged. The data across the three schools showed that the management of EWMP was fully implemented by the school principal, appointed coordinators and all teachers and students.

Theme 1.Proper Solid Waste Segregation and Avoidance (PSWSA).

The findings revealed that they also exercised waste minimization measures like recycling, composing, reuse and recovery before the collection of waste. Also, the schools developed an appropriate incentive scheme as an integral component of the program, and convened joint meetings of the school, parents and city's ecological waste management office. The study's findings also showed that the schools practiced proper segregation and collection of school wastes and ensured the proper communication and cooperation with the teachers.

Theme 2 Proper communication, cooperation and coordination (PCCC).

These three schools showed coordination and cooperation. According to Juneja (2011) "Coordination is required from employees and departments at work irrespective of their work. Cooperation is emotional in nature because it depends on the willingness of people working together." The three schools maintained and supervised the EWMP with their school heads. The teachers implemented the program toward the students. Based on the findings, the school heads, teachers and students were working hand on hand together to achieve the common goal.

The school practiced proper communication and guidelines. Being able to communicate effectively is the most important of all life skills. The desired outcome or goal of any communication process is understanding (SYN, 2017). The study findings also revealed that the schools practiced cooperation in the collection of waste in accordance to the RA 9003 and because of this, these three schools were recognized and awarded by the city government.

Sub questions 4, 5, 6 and 7. How similar or different does the EWMP to the RA 9003 or Ecological management Act of 2000? Why do you think this school got the award? What mechanisms are in place to make sure the sustainability of the success of the program?

How does the school maintain the motivation of the community towards EWMP? In exploring these sub questions, similar themes emerged. The data across the three schools showed that the functionality of EWMP was fully implemented based on RA 9003, Executive Order s.2011and D.O. 72 s 2003. The convergence of these findings resulted in the study's four themes identification and framework: ensure proper waste segregation and solid waste avoidance, ensure proper communication, cooperation and coordination, school's systematic administration of the program, and adapt trainings and educational promotion in integration to ecological solid waste management.

Theme 3 Systematic Administration of the Program (SAP).

Based on the study's findings, the schools revealed the systematic administration of MRF and the EWMP was managed by the school personnel such as school heads, coordinators ,teachers and students. The findings revealed that all schools commented through the interview that RA 9003 ensured the protection of public health and environment and managed by the LGUs and the findings also revealed that the school would have produced tons of wastes if EWMP was not implemented. The wastes generated by the grade school pupils were composed of food packaging and container materials either from the school canteen or from the pupils' respective homes (Parocha et al, 2015). The findings revealed that all schools' common wastes were paper and plastic containers like cups and bottles wherein these wastes were converted to cash.

Theme 4 Adapt Ecological Waste Training and Promotion (AEWT).

The study findings revealed that these schools have been recognized and awarded by the city government

and to increase the motivation, schools provided training and education in integrated ecological solid waste management which was facilitated by the school heads and other personnel. There were some cases that schools promoted the EWMP in the events like PTA meeting, and summit where in all LGU's were invited to listen and share ideas about the school program. The study also found out that there were no standard guidelines in the school about EWMP from the city government and because of this, schools created various program implementations. All schools that were recognized and awarded by the city government ensured proper segregation in the classroom as guided by the teacher or adviser. These findings could serve to prepare future school heads, coordinators, and teachers, and could be used to ensure that the school followed the EWMP framework to be recognized and awarded by the city government.

Cross Case Analysis

In the cross case-analysis,it wanted to consider in what areas the three cases suggested the same points, where they differed, and where the three cases conflicted. The following section considered how the major themes emerged from the cross-case analysis of the transcripts from interviews, school documents, and observation and school artifacts. The framework (Figure 2) showed the similarities and differences of the cases.

Figure 2 Cross Case Analysis Summary Framework

Research Question	Category	Theme/s
1. How is the Ecological Waste Management program implemented?	NVES * Ensured proper waste segregation * provided segregation boxes * properly marked trash bins * film viewing * served as role model * utilized open-communication	1. Proper Solid Waste Segregation, and Avoidance (PSWSA).
	BN2ES * Ensured proper waste segregation * provided segregation boxes * properly marked trash bins * guidelines * utilized open-communication * encouraged the students *motivated the students * giving incentives	

Research Question	Category	Theme/s
	SINHS * Ensured proper waste segregation * provided segregation boxes * properly marked trash bins * used daily monitoring * had proper recording * provided guidelines * encouraged the students * motivated the students * provided incentives * provided prizes and awards	
2. How functional is the school in implementing Ecological Waste Management Program in terms of: **Adaptation**	NVES * EWMP managed by the school personnel * School MRF received wastes of the school * RA 9003 Managed by the LGU's * MRF established by the LGU's received all kinds of wastes	2. Proper communication, cooperation and coordination (PCCC)
	BN2ES * EWMP managed by the school personnel * School MRF received wastes of the school * RA 9003 Managed by the LGU's * MRF established by the LGU's received all kinds of wastes	
	SINHS * EWMP managed by the school personnel * School MRF received wastes of the school * RA 9003 Managed by the LGU's * MRF established by the LGU's received all kinds of wastes	

Research Question	Category	Theme/s
Goal attainment	NVES * Ensured the cooperation in collection of wastes in accordance to the RA 9003 * Recognized by the government	3. Systematic administration of the program (SAP)
	BN2ES * Ensured the cooperation in collection of wastes in accordance to the RA 9003 * Received an award	
	SINHS *Recognized by the city government * Had proper implementation and guidance	
Integration	NVES * Ensured the proper segregation and collection of school wastes.	
	BN2ES * Ensured the proper communication * Had cooperation with the teachers	
	SINHS * Ensured the proper segregation and collection of school wastes. * Had open-communications * Utilized equal functions * cooperation	
Latent Maintenance	NVES * recognition * incentives * awards and certificates * informative	4. Adapt Ecological Waste training and promotion

Research Question	Category	Theme/s
	BN2ES * motivation * educational promotion * environmental campaign * greening environment * recognition	
	SINHS *Cooperation *Educational promotion *Environmental campaign *LGU's participants *Teachers' and students' role	

The cross case analysis identified four themes that emerged from the data within and cross-case analysis. These themes were the following:

1. Proper Solid Waste Segregation and Avoidance (PSWSA)
2. Proper Communication, Cooperation and Coordination (PCCC)
3. Systematic Administration of the Program (SAP).
4. Adapt Ecological Waste Training and Promotion (AEWTP).

The PPSA framework (figure 3) showed the overall framework of the three schools based from the cross-case analysis. The PPSA framework on EWMP is managed by the school principal, the overseer of the implementation of the program, supervised by the MRF coordinators of the schools, the teachers as the implementers of the program toward the students, and the city government recognized it. All of these school personnel must function based on the practices imposed by the RA 9003, the AGIL system will strengthen the EWMP in the school supported with its framework.

As shown in Table 2, the students' conditional knowledge is high (P80) and average (P60) in declarative and procedural knowledge. In this aspect of metacognition, the results show that students know what learning strategy to use, how to use it, when and why there is a need to use it.

The regulation of cognition shows that students' debugging strategies are high (P80), while information management strategies and evaluation is at average level (P60). It suggests that before the study, students already had skills in organizing and processing information, assessing and analyzing the effectiveness of strategy used and in correcting performance errors.

Declarative knowledge and evaluation have the lowest mean in the knowledge about cognition and regulation of cognition. The results accord with the findings of Schraw and Moshman (1995) which states that slower to develop are monitoring and evaluation of cognition which sometimes remain not fully developed in many adults.

Figure 3 The PPSA Framework on School Management and Practices for the Implementation of an Ecological Waste Management Program
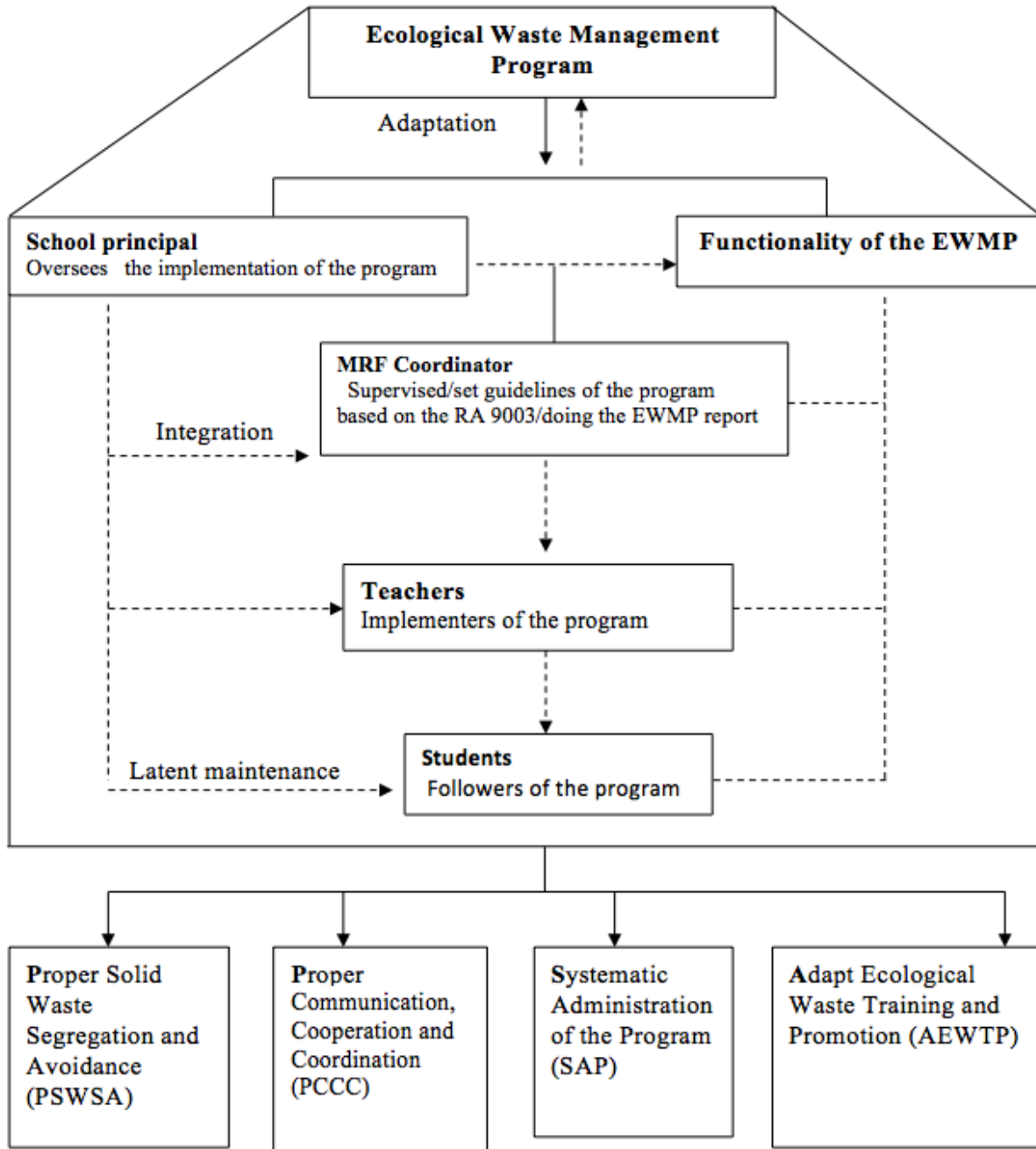
4. Discussion

In the Philippines different institutions have different strategies and techniques in implementing Republic Act 9003 or the Ecological Solid Waste Management Act. Several schools have their own practices in order to work in the school and improve outcomes for students as well as teachers as the school principal oversees the implementation of the program. As part of the   school

community, everyone inside the school has to do equal functions as part of the body. The AGIL system stands for adaptation, goal attainment, integration and latency. This system helped the school to adapt the changes in achieving the goal in cooperation with everybody within the institution. By maintaining and renewing both the motivation of individuals and the cultural patterns it will create and sustain good motivation pertaining to waste management. These three stages would play an important role in the school institution to have a good framework about school management and practices in the implementation of the Material Recovery Facility (MRF) recycling program.

A system must adapt to its environment and to its needs; otherswise, having a Material Recovery Facility recycling program in the school is useless. It is needed to reduce the school wastes and to abide by RA 9003. Students must also adapt the changes done in the school, as part of the system. To achieve its goal, everyone in the school should function well as a whole; students, parents, teachers and school head must have an interrelationship to attain the common goal. It "must furnish, maintain, and renew both motivation of individuals and the cultural patterns that create and sustain the motivation" (Retzer, 2017).

School must adapt to its environment and adapt the environment to its needs. This change that the school must adapt is very important. Before, schools in Antipolo do not have their own Material Recovery Facility or MRF; all wastes are thrown without doing anything to them. But now, the city government of Antipolo mandates that all schools in Antipolo must have their own Material Recovery Facility so that students can segregate their waste properly.

Defining and achieving goals in a system entails the cooperation of everybody inside the system to fully achieve the goals. Integration and interrelationship of the school and its stakeholders, students, teachers,

staff and school head will strengthen sustainability of the program, and last is maintaining and renewing both the motivation of individuals and the cultural patterns that create and sustain the motivation. This will aid if the school the management wants the students to learn proper segregation. However, if the the school does not have the program on how to segregate, positive reinforcement must apply. In order for the students to learn the proper waste segregation and abide to what is mandated in RA 9003, the school must have a Material Recovery Facility or MRF.

Theme 1 Proper Solid Waste Segregation and Avoidance (PSWSA).
The findings revealed that those schools also exercised waste minimization measures like recycling, composing, reuse and recovery before the collection of waste. Also, the schools developed an appropriate incentive scheme as an integral component of the program, and convened joint meetings of the school, parents and city's ecological waste management office. The study findings also revealed that the schools showed the proper segregation and collection of school wastes and ensured the proper communication and cooperation with the teachers.

Theme 2 Proper communication, cooperation and coordination (PCCC).
These three schools showed coordination and cooperation. According to Juneja (2011) "Coordination is required from employees and departments at work irrespective of their work. Cooperation is emotional in nature because it depends on the willingness of people working together." The three schools maintained and supervised the EWMP with their school heads. The teachers implemented the program toward the students. Based on the findings, the school heads, teachers and students were working hand in hand to achieve the common goal.

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guidelines. Being able to communicate effectively is the most important of all life skills. The desired outcome or goal of any communication process is understanding (SYN, 2017). The study findings also revealed that the school practiced the cooperation in collection of waste in accordance to RA 9003 because of this; these three schools were recognized and awarded by the city government.

Sub questions 4, 5, 6 and 7. How similar or different is the EWMP to the RA 9003 or Ecological Management Act of 2000? Why do you think this school got the award? What mechanisms are in place to make sure the sustainability of the success of the program?

How does the school maintain the motivation of the community towards EWMP? In exploring these sub questions, similar themes emerged. The data across the three schools showed that the functionality of EWMP was fully implemented based on the RA 9003, Executive Order s.2011and D.O. 72 s 2003. The convergence of these findings resulted in the study's four themes identification and framework. Ensure proper waste segregation and solid waste avoidance, ensure proper communication, cooperation and coordination, school's systematic administration of the program, and adapt trainings and educational promotion in integration to ecological solid waste management.

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Based on the study's findings the schools revealed the systematic administration of MRF and the EWMP was managed by the school personnel the school heads, coordinators teachers and students. The findings revealed that all schools commented through the interview that the RA 9003 ensured the protection of public health and environment and managed by the LGUs and the findings also revealed that the school produced tons of wastes if EWMP was not implemented. The waste generated by the grade school pupils were composed of food packaging and container materials either from the school canteen or from the pupils' respective homes (Parocha et al, 2015). The findings revealed that all schools' common wastes were paper and plasticscontainer like cups and bottles wherein these wastes were converted to cash.

Theme 4 Adapt Ecological Waste Training and Promotion (AEWT).

The study's findings revealed that these schools have been recognized and awarded by the city government and to increase the motivation, schools provided training and education in integrated ecological solid waste management which was facilitated by the school heads and other personnel. There were some cases wherein schools promoted the EWMP in events like PTA meetings, and summits where in all LGU's were invited to listen and share ideas about the school program. The study also found out that there were no standard guidelines in the school about EWMP from the city government and because of this, schools created various program implementations. All schools that were recognized and awarded by the city government ensured proper segregation in the classroom as guided by the teacher or adviser. These findings could serve to prepare future school heads, coordinators, and teachers, and could be used to ensure that the school followed the EWMP framework to be recognized and awarded by the city government.

5. Conclusion

This case study came up with a framework from the practices and management of the three schools that were recognized and awarded by the city government. The PPSA framework on Ecological Waste Management Program would serve as the pattern for the school. The emergent themes discovered during this study suggest that the practices of EWMP program must follow the RA 9003 which is the national standard of Solid

Waste Management in the Philippines. The EWMP in the school varies in other ways; different strategies, techniques and style were imposed. The coordinators of this study seem to recognize that the goal is to lessen the school wastes following the national standard of solid waste management. The set guidelines and targets for solid waste avoidance and volume reduction through source reduction and waste minimization measures, include composing, recycling, reuse, recovery, and others before collection (RA, 9003). These guidelines served as a pattern for the school on how the school wastes are treated before the disposal.

A second recommendation is for the lawmakers to set standard guidelines on this program specifically to the school; hence, that this program following RA 9003 can also be utilized.This is upon knowing that the scope of the RA 9003 is broad and had no specific design for the school.

The final recommendation focuses on the research students' behavior and level of awareness of this program since the school consists of almost 90 percent students.

6. Recommendations

This study examined the practices and management of the three schools that were recognized and awarded by the city government. A future study could expand the research to look at the momentum of the program so that it could turn into a habit more specifically to the students. Recognition and awards motivate students to perform continuously and develops environmental awareness in the community. Motivation is one of the forces that lead to performance. Motivation is clearly important if someone is to perform well; however, it is not sufficient (Lewis, 2005). There is a limited literature on the school practices and management of the Ecological Waste Management Program and this study was intended to fill that gap.

The first recommendation is to focus on the city government to have an allocation fund for this program to support the school continuously. It would be better if the city government allocate financial assistance with this program and supervise it continuously. In order for the school to have a proper treatment facility for other wastes or special wastes inside the school, this program needs to be strengthened so that all schools in the Philippines must have it.

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