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Battling Anomalies in Hydrometeorological Allocation (BAHA): Assessing Students' Knowledge in Flood Control Corruption as Basis for Enhancing Teaching Strategies on Araling Panlipunan on Corruption Issues

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ABSTRACT

This study examined the level of students' knowledge on flood control corruption and its implications for enhancing teaching strategies in Araling Panlipunan. The respondents were 296 Junior High School students of the University of La Salette, Incorporated. The study employed a descriptive-quantitative research design, using a researcher-constructed questionnaire with a five-point Likert scale for data collection. Findings revealed that the respondents demonstrated a sufficient level of knowledge across all indicators, including flood control concepts, corruption in flood control projects, identification of involved officials, and awareness of related laws and penalties. Overall, students showed a general understanding of flood control corruption; however, their knowledge was limited in terms of legal frameworks, governance mechanisms, and institutional processes. The study further indicates that while students are aware of real-world issues on corruption and disaster risk management, there is a need to strengthen their critical thinking and legal literacy. It emphasizes the importance of improving instructional strategies in Araling Panlipunan through the integration of real-life issues, case-based learning, and civic education to enhance engagement, understanding, and civic responsibility among learners.

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KEYWORDS:

Flood control, Corruption, Civic awareness, Hydrometeorological, Teaching strategies

1. INTRODUCTION

Corruption remains one of the most pressing issues affecting societies worldwide, as it undermines democratic institutions, weakens economic growth, and erodes public trust in governance. According to the United Nations Office on Drugs and Crime, corruption diverts public resources away from essential services and contributes to inequality and injustice.

Corruption in many developing countries affects the delivery of basic services such as education, healthcare, and infrastructure. It disproportionately harms vulnerable groups by limiting access to opportunities and increasing inequality (Transparency International, 2023). When corruption becomes widespread, it may become normalized, making it harder to detect and eliminate.

Bribery, embezzlement, nepotism, and fraud are examples of corruption, which is sometimes defined as the misuse of authority for personal benefit. It can impede development, erode governmental institutions, and skew policy (World Bank, 2020). Understanding its nature is essential in identifying its effects and developing strategies to address it in specific contexts.

On the other hand, flooding is a major natural hazard that damages infrastructure, disrupts livelihoods, and threatens human safety. The World Bank notes that floods account for significant global disaster losses, especially in low-lying and urban areas, and are becoming more frequent due to climate change. Hence, in the Philippines, due to frequent typhoons and high rainfall intensity. Effective flood control depends on accurate meteorological and hydrological data such as rainfall patterns, river discharge, and watershed conditions.

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Meteorological allocation refers to the systematic utilization of weather-related data in the planning and design of flood control infrastructure. Empirical studies have demonstrated that the integration of reliable meteorological and hydrological information significantly enhances flood mitigation efforts by guiding the appropriate siting and structural design of flood control measures, such as drainage systems and dikes (Macuha et al., 2025).

Real-time meteorological monitoring and forecasting systems enhance flood prediction and early warning, improving disaster response (Arante et al., 2025). Hydrological studies also show that extreme rainfall significantly increases flood risks, emphasizing the need for continuous environmental data monitoring (Tejada et al., 2023). When meteorological and hydrological data are integrated, the accuracy of flood estimation and planning is further improved (Hoey et al., 2025). These approaches support effective flood control, which involves managing water flow to minimize damage through both structural measures, such as dams, levees, drainage systems, and barriers, and non-structural strategies like land-use planning, early warning systems, and community awareness programs (U.S. Environmental Protection Agency, 2021).

Understanding flood control helps identify effective solutions and improve community resilience. This study explores flood control strategies and their effectiveness in reducing flood impacts in a specific area.

However, the implementation of flood control projects by both government and private organizations may also give rise to opportunities for corruption. Corruption in flood-related disaster management initiatives constitutes a global concern that undermines sustainable development, weakens governance, and adversely affects community well-being, particularly in developing countries. Such practices have far-reaching implications, as they compromise economic stability, threaten environmental safety, and reduce the effectiveness and reliability of public service delivery.

Transparency International notes that corruption weakens climate action by diverting funds and causing poor implementation of flood control projects, especially in vulnerable countries with weak institutions. This reduces the effectiveness of infrastructure and increases disaster risks. With Transparency International reporting a score of 32/100 in 2025, ranking the country 120th out of 182, indicating high perceived corruption. It is also a major public concern affecting trust and governance.

In flood control projects, corruption manifests through irregularities such as ghost projects, overpricing, and misuse of funds, resulting in significant financial losses and substandard or incomplete infrastructure. These practices weaken disaster protection and increase community vulnerability to flooding. This underscores the need to address governance issues alongside technical flood management and highlights the importance of citizen participation in promoting transparency and accountability.

Thus, this study sought to assess students' knowledge of flood control corruption as a basis for enhancing teaching strategies in Araling Panlipunan on corruption-related issues.

II. METHODOLOGY

The research design that effectively guided the researchers in identifying, formulating, and gathering data from the respondents is the descriptive-quantitative approach. This design aims to assess students' level of knowledge regarding corruption in flood control projects in the country. Furthermore, the findings of this study will serve as a basis for enhancing the teaching strategies of the Araling Panlipunan Department in discussing corruption-related issues.

This study was conducted at the University of La Salette, Incorporated High School, Junior High Department situated at Malvar, Santiago City, Isabela.

The respondents of the study were students from the Junior High School Department of the University of La Salette, Incorporated. The sample size was determined using random sampling across each grade level. Given a total population of 1,280 students, a confidence level of 95%, and a margin of error of 5%, the required sample size was computed to be 296 respondents.

The researchers utilized a survey questionnaire as the primary research instrument in this study. A survey questionnaire consists of a set of structured questions designed to collect, assess, and interpret respondents' perspectives. It serves as a systematic method of gathering information from a specific group of participants.

The questionnaire employed a 5-point Likert scale to measure the students' level of knowledge regarding flood control corruption in the Philippines. It was developed by the researchers and divided into two main parts. The first part focused on the respondents' profile, specifically their grade level, while the second part assessed their level of knowledge of issues related to flood control corruption.

Cronbach's Alpha was employed to determine the reliability of the questionnaire. The researchers conducted a pilot test by administering the constructed instrument to 30 randomly selected students from different grade levels. The questionnaire obtained an overall reliability coefficient of 0.93, which indicates excellent internal consistency. Consequently, the researchers deemed the instrument reliable and suitable for use in data collection.

The researchers secured permission from the school administration prior to the conduct of the study. A formal request, accompanied by a lesson plan, was presented to the school principal for approval. Upon obtaining authorization,

the researchers proceeded with the administration of the research instrument.

The data were collected through an online survey questionnaire administered via Google Forms. The distribution of the questionnaire was facilitated through Araling Panlipunan classes to ensure proper coordination and participation of the respondents. The survey link was disseminated to the students through their Facebook accounts and email addresses. Respondents were required to log in using their Gmail accounts to access the questionnaire, ensuring that each participant could only submit one response.

Before answering the questionnaire, the researchers provided a clear explanation of the purpose and nature of the study. The respondents were informed that their participation was voluntary and that they were expected to answer the questions honestly. Furthermore, the researchers assured the respondents that all information gathered would be treated with strict confidentiality and that their identities would not be disclosed in any part of the study.

During the data collection process, the researchers monitored the responses to ensure completeness and accuracy. All submitted questionnaires were carefully reviewed to verify that no items were left unanswered.

After the data collection phase, the responses were systematically organized, coded, and subjected to statistical analysis. The researchers sought the assistance of a statistician to ensure accurate interpretation and analysis of the data. The results served as the basis for assessing the students' level of knowledge of flood control corruption and for proposing improvements to the teaching strategies of the Araling Panlipunan Department in addressing corruption-related issues.

The data gathered through the questionnaire were subjected to appropriate statistical analysis. Frequency count and percentage were used to describe the profile of the respondents, particularly in terms of their grade level. These statistical tools were also utilized to present the distribution of responses regarding the students' level of knowledge of flood control corruption.

To determine the overall level of knowledge of the respondents, weighted mean was employed. This statistical measure was used to evaluate the students' responses to each item in the questionnaire and to assess whether their level of knowledge could serve as a basis for enhancing the teaching strategies of the Araling Panlipunan Department in addressing corruption-related issues. The mean scores for each item were computed, analyzed, and interpreted accordingly.

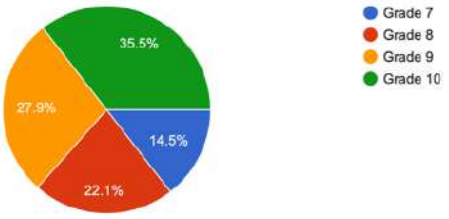
Furthermore, a 5-point Likert scale was utilized to measure the respondents' level of knowledge. Each response was assigned a corresponding numerical value, which served as the basis for quantitative analysis. The scale used in the study is presented below:

Numerical Value	Mean Rating	Description
5	4.21-5.00	Extensive level of knowledge
4	3.41-4.20	Sufficient level of knowledge
3	2.61-3.40	Moderate level of knowledge
2	1.81-2.60	Limited level of knowledge
1	1.00-1.80	No knowledge

III. RESULTS

This section presents the findings of the study, its analysis, and interpretation of data gathered.

Graph 1. Demographic Profile of Students



According to the graph, it presents the demographic profile of the students of University of La Salette, Incorporated High School who participated in the survey conducted by the Araling Panlipunan Department; BAHA: Battling Anomalies in Hydrometeorological Allocation—Assessing Students' Knowledge in Flood Control Corruption as Basis for Enhancing Teaching Strategies in Araling Panlipunan on Corruption Issues

Based on the records, 35.5% were from Grade 10, 27.9% from Grade 9, 22.1% from Grade 8, and 14.5% from Grade 7. The data indicate that the largest proportion of participants came from Grade 10, while the smallest proportion came from Grade 7.

Table 1. Mean Responses of Students on Their Knowledge of Flood Control

Statement	Weighted Mean	Interpretation
1. I know the meaning of flood control.	4.30	Extensive level of knowledge
2. I know the primary objectives of flood control projects.	4.01	Sufficient level of knowledge
3. I am familiar with examples of flood control infrastructure (e.g., dikes, drainage systems, floodways, etc.).	4.09	Sufficient level of knowledge

4. I understand the causes of flooding in the Philippines.	4.43	Extensive level of knowledge
5. I know the effects of flooding on the community and the economy.	4.48	Extensive level of knowledge
6. I have sufficient knowledge of how flood control projects are funded.	3.69	Sufficient level of knowledge
7. I know which government agencies are responsible for flood control.	3.73	Sufficient level of knowledge
8. I have sufficient knowledge about alternative solutions to flooding.	3.85	Sufficient level of knowledge
Overall Weighted Mean	4.07	Sufficient level of knowledge

As shown in the table, the respondents have a Sufficient Level of Knowledge on flood control, with an overall weighted mean of 4.07. The highest mean was 4.48, indicating that students are most knowledgeable about the effects of flooding, while the lowest mean was 3.69, showing relatively lower knowledge about the funding of flood control projects. Overall, the findings indicate that students have adequate knowledge of flood control.

Table 2. Mean Responses of Students on Their Knowledge of Corruption and the Flood Control Issue

Statement	Weighted Mean	Interpretation
1. I understand the meaning of corruption.	4.32	Extensive level of knowledge
2. I know how corruption manifests in flood control projects.	4.07	Sufficient level of knowledge
3. I am aware of the effects of corruption on the quality of flood control projects.	4.27	Extensive level of knowledge
4. I understand the relationship between corruption and the worsening of flooding and disasters.	4.23	Extensive level of knowledge
5. I know ghost projects or overpriced flood control projects.	4.04	Sufficient level of knowledge
6. I am familiar with reports concerning corruption related to flood control.	3.95	Sufficient level of knowledge
Overall Weighted Mean	4.16	Sufficient level of knowledge

Table 2 shows that the respondents have a Sufficient Level of Knowledge on corruption in flood control, with an overall weighted mean of 4.16. The highest mean was 4.32, indicating that students are most knowledgeable about the meaning of corruption, while the lowest mean was 3.95, showing relatively lower familiarity with reports on corruption related to flood control. Overall, the findings indicate that students have adequate knowledge of corruption in flood control projects.

Table 3. Mean Responses of Students on Their Knowledge of the Names of Officials Involved in the Issue

Statement	Weighted Mean	Interpretation
1. I have heard of the names of some officials implicated in the flood control issue.	3.87	Sufficient level of knowledge
2. I know where to obtain information about the officials involved (TV, radio, newspapers, social media).	4.19	Sufficient level of knowledge
3. I understand why it is important to inform the public about officials involved in corruption.	4.21	Extensive level of knowledge
4. I know the possible consequences when an official is proven to be involved in flood control corruption.	3.99	Sufficient level of knowledge
5. I am familiar with government actions against officials implicated in this issue.	3.82	Sufficient level of knowledge
6. I have sufficient knowledge of how the names of implicated officials affect public perception.	3.93	Sufficient level of knowledge
7. I understand the role of the media in exposing officials involved in flood control corruption.	4.25	Extensive level of knowledge
Overall Weighted Mean	3.98	**Sufficient level of knowledge**

Table 3 display that the respondents have a Sufficient Level of Knowledge regarding the names of

officials involved in the issue, with an overall weighted mean of 3.98. The highest mean was 4.25, indicating that students are most knowledgeable about the role of the media in exposing officials involved in flood control corruption, while the lowest mean was 3.82, showing relatively lower familiarity with government actions against implicated officials. Overall, the findings indicate that students have adequate knowledge of the officials involved in the issue.

Table 4. Mean Responses of Students on Their Knowledge of Laws Violated and Penalties for Corruption

Statement	Weighted Mean	Interpretation
1. I know the anti-corruption laws in the Philippines (e.g., Anti-Graft and Corrupt Practices Act).	3.42	Sufficient level of knowledge
2. I am familiar with the agencies responsible for enforcing anti-corruption laws (e.g., Ombudsman, COA, Sandiganbayan).	3.46	Sufficient level of knowledge
3. I know the possible penalties for officials proven to be involved in corruption.	3.73	Sufficient level of knowledge
4. I understand how investigations involving officials implicated in corruption are conducted.	3.62	Sufficient level of knowledge
5. I know of cases of corruption related to flood control that have resulted in penalties.	3.77	Sufficient level of knowledge
6. I know the processes of holding officials accountable (impeachment, dismissal, disqualification from elections, imprisonment).	3.70	Sufficient level of knowledge
7. I am familiar with the limitations or weaknesses of existing anti-corruption laws.	3.78	Sufficient level of knowledge
8. I have sufficient knowledge of how laws help prevent corruption in flood control projects.	3.99	Sufficient level of knowledge
Overall Weighted Mean	3.68	Sufficient level of knowledge

Based on Table 4, the respondents have a Sufficient Level of Knowledge regarding the laws violated and penalties for corruption, with an overall weighted mean of 3.68. The highest mean was 3.99, indicating that students are most knowledgeable about how laws help prevent corruption in flood control projects, while the lowest mean was 3.42, showing relatively lower knowledge of the anti-corruption laws in the Philippines. Overall, the findings indicate that students have adequate knowledge of the laws and penalties related to corruption.

Table 5. Summary of Students' Mean Responses on Their Level of Knowledge Regarding Flood Control Corruption

Section of Survey	Weighted Mean	Interpretation
1. Knowledge of Flood Control	4.07	Sufficient level of knowledge
2. Knowledge of Corruption and the Flood Control Issue	4.16	Sufficient level of knowledge
3. Knowledge of the Names of Officials Involved in the Issue	3.98	Sufficient level of knowledge
4. Knowledge of Laws Violated and Penalties	3.68	Sufficient level of knowledge
Summary Weighted Mean	3.97	Sufficient level of knowledge

As shown in the Table 5, the respondents have a Sufficient Level of Knowledge regarding flood control corruption, with a summary weighted mean of 3.97. Among the four areas, Knowledge of Corruption and the Flood Control Issue obtained the highest weighted mean (4.16), while Knowledge of Laws Violated and Penalties recorded the lowest (3.68). Overall, the findings indicate that the respondents have adequate knowledge of flood control corruption.

IV. DISCUSSION

4.1. Demographic Profile

Based on the records, 35.5% were from Grade 10, 27.9% from Grade 9, 22.1% from Grade 8, and 14.5% from Grade 7. The data indicate that the largest proportion of participants came from Grade 10, while the smallest proportion came from Grade 7.

This suggests that students in the higher-grade levels demonstrated greater participation in the study, possibly due to their broader knowledge and heightened awareness of social issues such as flood control corruption. The distribution of participants according to grade level also reflects a balanced representation of students from different levels within the Junior High School.

4.2. Mean Responses of Students on Their Knowledge of Flood Control

The results highlighted that the overall weighted mean of 4.07 corresponds to the interpretation "Sufficient level of knowledge." This indicates that, in general, the students of University of La Salette, Incorporated – High School possess sufficient knowledge regarding flood control. This means that they have adequate awareness and understanding of the concepts, objectives, and processes related to flood mitigation and management. Based on Paton & Johnston (2001) show that formal education, combined with lived experiences, enhances students' perception and understanding of flood hazards, leading to greater disaster literacy (International Journal of Mass Emergencies and Disasters).

The statement that obtained the highest rating was, "I know the effects of flooding on the community and the economy," with a weighted mean of 4.48, interpreted as "Extensive level of knowledge." Based on the findings of Morss, Demuth, & Lazo (2016) observed that when students connect hazard content to real-world impacts, their retention and comprehension improve significantly (Weather, Climate, and Society). Students tend to remember and understand social and economic impacts more readily than technical or procedural flood control aspects. This underlines why students with personal or observed flooding experiences, or curricula that emphasize impacts, scored this item highly. This shows that students have a strong understanding of the adverse impacts of flooding on society and livelihoods, which may be attributed to personal experiences or classroom discussions.

This was followed by other highly rated statements such as, "I understand the causes of flooding in the Philippines" (4.43) and "I know the meaning of flood control" (4.30). These results suggest that students have a solid foundation in the fundamental concepts of flood control and the causes of flooding. The result is consistent with Shaw et al. (2012): A global review of disaster education found that students generally grasp basic hazard causes when these are integrated into science and social studies learning (Disaster Prevention and Management). As emphasized by Heath et al. (2003): Found that adolescents worldwide can accurately describe natural hazard mechanisms when a curriculum includes hazard-specific modules, such as flooding. These studies affirm that, unaffected by region, learners develop a solid foundation of hazard mechanics when provided with relevant educational input.

On the other hand, the statement with the lowest rating was, "I have sufficient knowledge of how flood control projects are funded" (3.69). Although still interpreted as "Sufficient level of knowledge," this result indicates the need to further enhance students' understanding of the financial and administrative aspects of flood control projects, which reflects a common global pattern documented in disaster education research. In the study of Zhang et al. (2019) found that in their study of disaster risk perception in China, students often understand hazard causes and impacts but lack awareness of governance, institutional frameworks, and financing systems unless these are explicitly taught (International Journal of Disaster Risk Reduction). Similarly, Peek & Cutchin (2010) reported that even when schools teach hazard science effectively, policy-related and administrative knowledge (e.g., how governments plan, fund, and implement mitigation) is weak unless intentionally included in the curriculum (Children, Youth and Environments). UNESCO & UNICEF (2017) global monitoring reports also highlight that institutional literacy (understanding how government plans, budgets, and implements DRR) is one of the least developed areas in school-based disaster risk education worldwide.

Overall, the data show that students have a broad awareness and understanding of flood control. However, certain aspects, particularly those related to funding mechanisms and the government institutions involved, require further emphasis in teaching and classroom discussions in Araling Panlipunan.

4.3. Mean Responses of Students on Their Knowledge of Corruption and the Flood Control Issue

The findings showed that the overall weighted mean of 4.16 is interpreted as "Sufficient level of knowledge." This indicates that the students of University of La Salette, Incorporated – High School possess sufficient knowledge and understanding of corruption in relation to flood control projects. It further demonstrates that they are aware of the effects of corruption on project quality, implementation, and public trust in government. The result aligns with global research showing that learners can develop a strong conceptual understanding of corruption when governance and civic issues are integrated into social studies or citizenship education. According to the United Nations Office on Drugs and Crime (UNODC), corruption education programs across countries consistently show that students are able to define corruption accurately and recognize its general effects on governance, service delivery, and development. However, deeper contextual understanding depends on exposure to real-life governance issues and case-based learning. This supports the findings that students demonstrate sufficient to extensive conceptual knowledge of corruption.

The highest-rated statement was "I understand the meaning of corruption" (4.32), interpreted as "Extensive level of knowledge." This indicates that students have a clear understanding of corruption as an unethical practice that adversely affects governance and national development. As stated by the Galtung (2006) in corruption and governance studies, argues that corruption is widely understood among

youth as abuse of public power for private gain, especially when taught in relation to real governance systems. This explains why students in your study demonstrate "extensive knowledge" of the concept itself. This was followed by the statements "I am aware of the effects of corruption on the quality of flood control projects" (4.27) and "I understand how corruption affects public trust in government" (4.25), both interpreted as "Extensive level of knowledge." Adding to this, Rose-Ackerman & Palifka (2016), in their global analysis of corruption and government systems, explain that corruption is one of the most easily understood governance problems because it directly relates to fairness, justice, and everyday experiences with public services. This reinforces why students can clearly identify and explain what corruption means, even at the secondary education level. These results suggest that students have a deeper understanding of the effects of corruption, not only on government projects but also on the relationship between citizens and the state. This implies that they recognize corruption as a factor that can lead to low-quality infrastructure and a decline in public trust.

Meanwhile, the lowest weighted mean was obtained by the statement "I am familiar with reports concerning corruption related to flood control" (3.95). Although still interpreted as "Sufficient level of knowledge," this indicates a limited exposure to actual cases or documented reports of corruption in the country. According to Heywood (2018), in global corruption studies, students often understand the corruption conceptually but have limited exposure to specific documented cases, especially those involving technical sectors like infrastructure or flood control. This is because corruption cases are often complex, underreported, or presented in technical legal language that is less accessible to learners. Similarly, UNESCO Global Citizenship Education (2019) reports that students worldwide show weaker performance in "applied civic knowledge," particularly in recognizing real-world governance cases unless these are explicitly integrated into classroom materials or current events discussions.

Overall, the data show that students possess extensive and sufficient knowledge regarding the concept, effects, and implications of corruption in flood control projects. However, there remains a need to further enrich classroom discussions by incorporating concrete examples and current events like real cases, investigative reports, and current governance issues to deepen students' understanding of the issue in real-life contexts.

4.4. Mean Responses of Students on Their Knowledge of the Names of Officials Involved in the Issue

As shown in the results, the overall weighted mean of 3.98 is interpreted as "Sufficient level of knowledge." This indicates that the students of University of La Salette, Incorporated – High School possess a sufficient level of awareness regarding the officials involved in the issue of flood control corruption. It suggests that they are sufficiently informed about news reports, government actions, and the role of media in addressing such concerns. This aligns with global research showing that adolescents and high school students increasingly develop high levels of political and media awareness when corruption and governance issues are frequently discussed in public discourse and digital platforms. According to the United Nations Educational, Scientific, and Cultural Organization (UNESCO) Global Citizenship Education framework, students worldwide are becoming more aware of governance issues, particularly corruption cases involving public officials, due to increased exposure to news media and social media platforms. This supports your finding that students have a broad awareness of officials implicated in flood control corruption and understand how information is accessed through media channels.

The highest-rated statement was "I understand the role of media in exposing officials involved in flood control corruption" (4.25), interpreted as "Sufficient level of knowledge." This reflects the students' strong awareness of the media's role in promoting transparency and accountability. It also indicates their understanding of the importance of public awareness in addressing issues of corruption in society. As found by the United Nations Office on Drugs and Crime (UNODC) emphasizes in its anti-corruption education modules that media plays a critical role in promoting transparency by exposing corrupt practices and holding public officials accountable. This reinforces students' strong understanding of media as a watchdog institution. Similarly, Norris (2011) in her global study on democratic governance highlights that media exposure significantly increases political awareness among young people, especially regarding corruption and government accountability. She explains that students who regularly engage with news media are more likely to understand institutional roles in exposing wrongdoing.

This was followed by the statement "I understand why it is important to inform the public about officials involved in corruption" (4.21), which likewise highlights students' recognition of the value of transparency and public information in maintaining trust and justice in governance. From the study of the Transparency International Global Corruption Barometer reports emphasize that public awareness is essential in reducing corruption because informed citizens are more likely to demand accountability and transparency from government institutions.

Meanwhile, the statement "I am familiar with government actions against officials implicated in this issue" (3.82) obtained the lowest weighted mean, suggesting that students have relatively limited exposure to specific government responses and legal measures taken against implicated officials. According to the World Bank

governance and accountability studies, while students and citizens are often aware of corruption cases, they have a limited understanding of judicial processes, disciplinary mechanisms, and institutional responses unless these are explicitly taught. Similarly, UNDP (2016) in its governance and anti-corruption frameworks notes that public knowledge tends to focus on scandal awareness rather than procedural justice—meaning people know who is involved but not what legal actions follow.

Overall, the results show that students demonstrate a relatively high level of political awareness regarding officials involved in flood control corruption. However, there is still a need to deepen their understanding of legal processes and government actions to help them develop a more balanced and critical perspective on the issue. In line with Dalton (2017) in The Good Citizen explains that young people today develop "cognitive political awareness" mainly through media exposure rather than formal instruction, leading to strong awareness of issues but weaker understanding of institutional processes. Additionally, OECD (2018) Civic Education Study found that students generally understand the social consequences of corruption (loss of trust, poor governance outcomes), but are less familiar with formal political and legal consequences.

Global studies consistently show that students are highly aware of corruption issues, especially through media exposure and public information about officials. They understand the importance of transparency and accountability in governance. However, their knowledge is generally limited when it comes to formal government procedures and legal responses to corruption cases. Overall, while students show strong awareness of corruption and its public implications, they still need a deeper understanding of institutional and legal processes.

4.5. *Mean Responses of Students on Their Knowledge of Laws Violated and Penalties for Corruption*

The findings revealed that the overall weighted mean of 3.68 is interpreted as "Sufficient level of knowledge." This aligns with global research indicating that students generally develop a moderate understanding of legal frameworks and anti-corruption systems, especially when these are taught within civic education or social studies subjects. According to the United Nations Office on Drugs and Crime (UNODC) through its Education for Justice (E4J) initiative, learners across different countries show an increasing awareness of the role of laws in preventing corruption. However, the UNODC also emphasizes that students often struggle with detailed knowledge of specific legal provisions and enforcement mechanisms unless these are explicitly integrated into instruction. This strongly supports the finding of "sufficient but not in-depth" legal understanding. This indicates that the students of University of La Salette, Incorporated – High School possess a sufficient understanding of laws and penalties related to corruption, particularly in relation to flood control issues. The results show that students are aware of existing anti-corruption laws as well as the government agencies responsible for their enforcement.

The highest-rated statement was "I have sufficient knowledge of how laws help prevent corruption in flood control projects" (3.99), indicating that students understand the importance of laws as a foundation of integrity and justice in governance. It also reflects their awareness of the role of legal frameworks in preventing irregularities and corruption in government projects. Based on the World Bank (2017) governance and anti-corruption framework reports highlight that legal systems are widely recognized by students and citizens as essential tools for ensuring accountability, transparency, and integrity in public infrastructure projects. Laws are often the most visible component of governance, making them easier for students to understand conceptually. Similarly, Rose-Ackerman & Palifka (2016) explain that anti-corruption laws function as deterrents by establishing clear sanctions for misconduct, which helps citizens understand their preventive role in governance systems. This supports your finding that students recognize laws as foundations of justice and integrity.

This was followed by the statements "I am familiar with the limitations or weaknesses of existing anti-corruption laws" (3.78) and "I have knowledge of cases of corruption related to flood control that have resulted in penalties" (3.77). These results suggest that students are capable of critical thinking regarding the challenges and limitations of legal systems and recognize that enforcement is not always fully effective. Correspondingly, UNDP (2016) governance reports emphasize that while corruption cases are widely discussed in the media, a detailed understanding of legal outcomes—such as convictions, penalties, or administrative sanctions—is often limited among youth. This is because legal proceedings are complex and not always publicly accessible in simplified form. Similarly, Heidenheimer & Johnston (2002) in global corruption studies explain that awareness of punishment mechanisms tends to lag behind awareness of corruption incidents themselves, creating a gap between "corruption recognition" and "justice system understanding."

Meanwhile, the lowest weighted mean was obtained by the statement "I know the anti-corruption laws in the Philippines (e.g., Anti-Graft and Corrupt Practices Act)" (3.42). Although still interpreted as "Extensive level of knowledge," this indicates the need to further deepen students' understanding of specific provisions and details of anti-corruption laws to strengthen their legal awareness. In agreement with the Organization for Economic Co-operation and Development (OECD) Civic Education and Global

Competence Studies, students worldwide often understand the purpose of laws but have limited familiarity with specific statutes and legal provisions, especially those involving technical or country-specific legislation. Similarly, the UNESCO Global Citizenship Education Framework (2019) notes that learners are generally more proficient in understanding principles of justice than in recalling or applying specific legal codes unless these are reinforced through case-based and experiential learning approaches.

Global studies show that students generally understand the role of laws in preventing corruption and recognize their importance in ensuring accountability and deterrence. They are also aware that legal systems are not always fully effective due to enforcement weaknesses. However, students tend to have limited knowledge of specific anti-corruption laws and legal provisions. Overall, while they demonstrate sufficient legal awareness, there is a need for a deeper understanding of concrete laws, enforcement processes, and legal mechanisms to strengthen their civic and legal literacy.

4.6. Summary of Students' Mean Responses on Their Level of Knowledge Regarding Flood Control Corruption

Based on Table 5, the overall weighted mean of 3.97 is interpreted as "Extensive level of knowledge," indicating that the students of University of La Salette, Incorporated – High School possess a high level of knowledge regarding the issue of flood control corruption. Among the indicators, "Knowledge of Corruption and the Flood Control Issue" obtained the highest mean (4.16), suggesting that students have a thorough understanding of the relationship between corruption and infrastructure projects. This aligns with global research indicating that students in disaster-prone and governance-sensitive contexts often demonstrate strong awareness of corruption, infrastructure issues, and public accountability, particularly when these topics are integrated into social studies and civic education. According to the United Nations Office on Drugs and Crime (UNODC) under its Education for Justice (E4J) initiative, learners worldwide commonly develop high-level awareness of corruption in public infrastructure projects when issues are discussed through real-life examples. However, a deeper understanding of governance systems and legal accountability often remains less developed unless explicitly taught in detail.

This was followed by "Knowledge of Flood Control" (4.07) and "Knowledge of the Names of Officials Involved in the Issue" (3.98), which reflect students' awareness of actual events and individuals connected to the issue. Meanwhile, "Knowledge of Laws Violated and Penalties" received the lowest mean (3.68), indicating the need for deeper discussion on legal frameworks and judicial processes related to corruption. The World Bank (2019) studies on public infrastructure governance emphasize that corruption is one of the most critical factors affecting infrastructure quality, especially in projects such as flood control systems. Students in many countries tend to understand this connection clearly because infrastructure corruption is frequently highlighted in media and public discourse. Similarly, Rose-Ackerman & Palifka (2016) explain that corruption in public works is one of the most visible forms of governance failure, making it easier for learners to grasp the relationship between corruption and infrastructure development.

Additionally, according to Transparency International Global Corruption Barometer reports, young people are increasingly becoming aware of public officials involved in corruption cases through media and social platforms. This exposure strengthens their recognition of real-world governance issues but may not always translate into deeper institutional understanding. Similarly,the Organization for Economic Co-operation and Development (OECD) Global Competence Study (2018) found that students across countries generally perform better in understanding issues and events than in understanding formal legal systems, judicial processes, and enforcement mechanisms. Likewise, UNDP governance reports emphasize that while awareness of corruption is high, understanding of legal accountability systems (such as penalties, case procedures, and institutional enforcement) remains limited among youth unless explicitly reinforced in classroom instruction.

Overall, the findings suggest that students demonstrate a broad level of awareness regarding the issue; however, there remains a need to further strengthen their understanding of legal aspects and accountability mechanisms. Global research shows that students generally have a strong understanding of corruption and its link to infrastructure, as well as solid knowledge of flood control concepts. Media and public discussions also help increase their awareness of real corruption cases and the involved officials. However, their understanding of laws, penalties, and accountability systems remains weaker. Overall, students demonstrate strong awareness of flood control corruption issues, but still need deeper learning on legal and governance mechanisms to fully develop civic literacy.

V. CONCLUSION AND RECOMMENDATION

Based on the findings of the study, the following conclusions are drawn:

1. The demographic profile of the respondents indicates that the majority of participants were Grade 10 students, while the smallest proportion came from Grade 7. This suggests that higher-grade levels exhibited greater participation in the study, which may be attributed to their increased exposure to civic, social, and governance-related issues.

2. The respondents demonstrated a sufficient level of knowledge regarding flood control. This implies that students possess an adequate understanding of the fundamental concepts, causes, effects, and significance of flood control systems. However, their understanding of technical dimensions, particularly financial allocation and institutional responsibilities, remains relatively limited.
3. In terms of corruption related to flood control, the respondents demonstrated a sufficient level of knowledge. This indicates that students have developed a conceptual awareness of corruption, particularly its implications on infrastructure quality, governance efficiency, and public trust. Nevertheless, deeper contextual and experiential understanding remains necessary to strengthen critical analysis of real-world corruption cases.
4. With regard to knowledge of officials involved in flood control corruption issues, the respondents demonstrated a sufficient level of knowledge. This suggests that students acquire information primarily through media and public discourse; however, their comprehension of institutional accountability mechanisms and legal procedures involving public officials remains limited.
5. In terms of knowledge of laws violated and corresponding penalties, the respondents demonstrated a sufficient level of knowledge. This indicates that while students possess general awareness of anti-corruption laws, there is a noticeable gap in their understanding of specific legal provisions, enforcement processes, and judicial mechanisms.
6. Overall, the findings reveal that the respondents demonstrate a sufficient level of knowledge regarding flood control corruption. This suggests that while students are generally informed about the issue, their understanding remains largely conceptual and experiential, with evident gaps in legal, institutional, and procedural dimensions of governance.

Based on the findings and conclusions of the study, the recommendations are the following:

1. The Araling Panlipunan curriculum should further enhance students' understanding of flood control projects by providing a more comprehensive discussion of their objectives, processes, and financial mechanisms. This includes strengthening learners' knowledge of how government funds are allocated, managed, and utilized to promote transparency, accountability, and proper governance in public infrastructure projects.
2. Araling Panlipunan Teachers should deepen classroom discussions on actual cases of corruption, particularly those involving flood control projects. The integration of real-life case studies, investigative reports, and documented incidents may help students better understand the real-world consequences of corruption and its impact on society, governance, and national development.
3. Lessons on anti-corruption laws, legal frameworks, and corresponding penalties should be systematically integrated into Araling Panlipunan instruction. This should include discussions on the roles of government institutions responsible for enforcing laws, as well as the procedures involved in investigating and penalizing corrupt practices, in order to strengthen students' legal and civic literacy.
4. Schools should conduct seminars, workshops, and interactive discussions focusing on transparency, accountability, and integrity in governance. Such activities aim to enhance students' critical thinking skills, promote civic awareness, and foster active engagement in addressing social and political issues within their communities.
5. Students should be trained to develop strong critical media literacy skills. This involves encouraging them to evaluate the credibility of information sources, distinguish factual news from misinformation or propaganda, and form informed judgments on political and governance-related issues, particularly those circulating on digital and social media platforms.
6. Values education should be strengthened by emphasizing core ethical principles such as honesty, responsibility, integrity, and patriotism. This will contribute to the formation of socially responsible learners who are committed to good governance and actively oppose corruption in society

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VII. DISCLOSURE

The authors claims that this research was not impacted by in any manner through personal connections, financial interests, or conflicting interests. It was an unbiased study and only for research and academic uses.

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