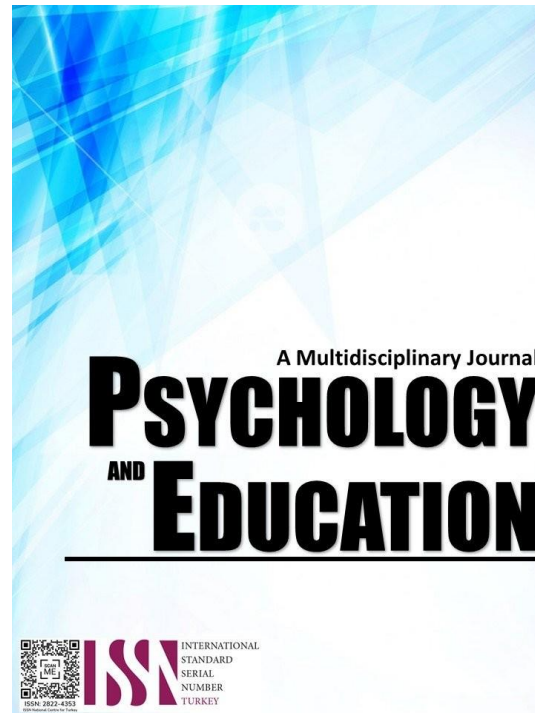


DEVELOPMENT ON HIGHER ORDER THINKING SKILLS OF THE GRADE SIX LEARNERS AND THEIR SOCIO-DEMOGRAPHIC PROFILE



PSYCHOLOGY AND EDUCATION: A MULTIDISCIPLINARY JOURNAL

Volume: 40

Issue 6

Pages: 848-856

Document ID: 2025PEMJ3893

DOI: 10.70838/pemj.400607

Manuscript Accepted: 05-15-2025

Development on Higher Order Thinking Skills of the Grade Six Learners and their Socio-Demographic Profile

Rose Marie B. Fernandez,* Larry R. Labay
For affiliations and correspondence, see the last page.

Abstract

This study investigated the development of higher-order thinking skills (HOTS) among Grade 6 learners in Araling Panlipunan within District 10, Division of Valencia City, Bukidnon. Utilizing a descriptive research design, the study assessed the learners' HOTS across four key areas: critical thinking, analytical thinking, comprehension, and reasoning skills. The study also explored the relationship between the learners' socio-demographic profile (age, sex, religious affiliation, family monthly income, and household size) and their HOTS development. A total of 112 Grade 6 learners were selected through purposive sampling based on their identified least mastered skills in Araling Panlipunan. The findings indicate a high level of HOTS development among the learners, suggesting that they are capable of applying critical thinking, analyzing information, and engaging in logical reasoning. However, the study also highlighted areas where learners could benefit from further development, such as evidence-based explanations and inferential thinking. Importantly, the study found no significant relationship between socio-demographic factors and the development of HOTS, suggesting that instructional strategies and learning experiences play a critical role in fostering these skills. The paper concludes with recommendations for educators to enhance HOTS development through targeted instructional strategies, enriched learning experiences, and inclusive teaching approaches that empower all learners to excel in critical thinking and reasoning.

Keywords: *higher order thinking skills (HOTS), araling panlipunan, grade 6 learners, socio-demographic factors, descriptive research*

Introduction

As an educator, I became acutely aware of the significance of identifying and assessing each learner's abilities. This awareness enabled me to provide more effective assistance in helping them achieve the desired outcomes in terms of their knowledge and our teaching methods. It was essential for teachers to have a solid grasp of how to identify, classify, and systematically assess the learning skills and competencies that students demonstrated, developed, and acquired. When categorizing learning abilities, they are generally divided into two main groups: basic cognitive skills, known as lower-order thinking skills (LOTS), and advanced cognitive skills, referred to as higher-order thinking skills (HOTS). The ability to differentiate and evaluate these categories was essential for choosing effective teaching methods and interventions that matched students' developmental stages and promoted successful learning and skill development.

Higher-order thinking abilities were essential to Araling Panlipunan instruction because of the subject's extensive coverage and depth of information. The topic frequently required the use of sophisticated cognitive skills due to its intrinsically complex and socially significant elements. Given its interdisciplinary nature, students were frequently expected to engage in analytical and interpretive tasks that required deep comprehension and critical thinking. These skills also empowered learners to participate in substantial discussions and explore content at a deeper level, promoting critical engagement and a more meaningful understanding of Araling Panlipunan topics.

Geraldo's 2021 study examined the degree to which Grade 6 pupils in Araling Panlipunan were mastering higher-order thinking techniques. Using a descriptive study approach, the researcher gathered information from 80 Grade 6 students who were hand-picked from several Agusan del Sur Division elementary schools via survey questionnaires. Based on their poor performance on pre-learning tests, the results showed that many of these children had trouble with higher-order thinking skills. They have the greatest potential for improvement, especially in their critical thinking and critical comprehension skills.

Learning problems and the large number of least mastered competencies among students in Araling Panlipunan were the main concerns that prompted the investigation. These gaps were frequently highlighted by low assessment scores, which indicated a lack of comprehension—not only of the teaching material but also of the assessment items themselves. Students' academic performance and mastery of necessary competencies were significantly hampered by these understanding deficiencies. Therefore, fostering higher-order thinking and learning skills in Grade six pupils in District 10 of the Division of Valencia City was one of the main issues that was found.

Another major concern observed during the research was the students' limited awareness of their own higher-order thinking abilities. Many Grades 6 learners seemed unaware of how to engage in critical, analytical, and logical thinking, or how to exercise sound reasoning and problem-solving skills. These deficiencies were apparent in their performance on various academic tasks, whether oral or written, as well as in classroom discussions and other participatory learning activities.

In light of these challenges, the study sought to investigate and promote the enhancement of higher-order thinking skills in Grade 6

students studying Araling Panlipunan. The goal of the study was to fully pinpoint the obstacles influencing students' higher-order cognitive skills. By doing so, the goal was to guide educators in applying relevant and practical assessment methods that would address these issues and support student learning. This deepened understanding of the learning challenges also allowed the researcher to investigate the underlying factors contributing to these difficulties, ultimately contributing to more effective instructional planning and student support strategies.

Research Questions

This study aimed to explore the obstacles that impede the development of higher-order thinking skills in Araling Panlipunan of Grade 6 pupils from District 10, Division of Valencia City. It aimed to address the following questions:

1. What demographics make up the respondents' profile in terms of:
 - 1.1 age;
 - 1.2 sex;
 - 1.3 religious affiliation;
 - 1.4 family monthly income; and
 - 1.5 household size?
2. How well-versed in higher order thinking are the sixth-grade students in Araling Panlipunan, regarding:
 - 2.1 critical thinking;
 - 2.2 analytical thinking;
 - 2.3 comprehension; and
 - 2.4 reasoning skills?
3. Does the level of development of the higher order thinking skills in Araling Panlipunan of the sixth-grade students significantly correlate with the demographic profile of the respondents, including age, sex, religious affiliation, family monthly income, and household size?

Methodology

Research Design

This study was carried out with a strictly quantitative methodology. In order to demonstrate and explain the important factors associated with the growth of higher-order thinking skills in Araling Panlipunan among Grade 6 students—with a particular emphasis on critical thinking, analytical thinking, comprehension, and reasoning abilities—it used descriptive technique. The study also discovered a strong relationship between the learners' level of higher-order thinking skill development and their demographic profile, which included age, gender, household size, monthly family income, and religious affiliation.

Respondents

The study included 112 sixth-grade students from District 10 in the Valencia City Division. The selection and inclusion of the pupil-respondents followed a purposive sampling method. The primary basis for their selection was the commonly observed least mastered learning skills, content areas, and competencies in Araling Panlipunan VI, as identified through the results of the pre-learning assessment.

Table 1 shows the study's respondent distributions.

Table 1. *Study's respondent distributions*

<i>School</i>	<i>Population</i>	<i>Respondents Taken</i>
Banlag IS	61	16
Bantal ES	26	16
Buco Sinait IS	50	16
Buyog ES	34	16
Dagatkidavao IS	111	16
Logdeck ES	32	20
Total	314	112

Research Instrument

To understand how well sixth graders think critically and analytically in Araling Panlipunan (Social Studies), we used a questionnaire. This questionnaire was adapted from Almadrones' (2017) work on developing higher-order thinking skills, and it helped us gather information about students' abilities in critical thinking, analysis, comprehension, and reasoning.

Procedure

A request letter and copies of the research proposal were sent to the relevant school authorities and signatories in order to obtain formal consent before the research was actually carried out. The parents were also given the assurance that the study closely followed the Data

Privacy Act, guaranteeing the secrecy and security of their children's rights during the study.

After receiving all required ethical permissions, the researcher started collecting data. Criteria for purposive selection were clearly defined to guarantee that only qualified pupils participated and answered the survey forms. Once the final list of respondents was identified, the survey questionnaires were distributed and administered by the researcher in person. The responders were supervised and directed during the administration process to make sure they comprehended the questions and provided accurate answers. In addition, interviews were conducted to gain deeper insights and further support the aims of the study.

Ethical Considerations

The protection, privacy, and welfare of each participant were given first priority during the study's execution, which was carried out with a firm commitment to ethical research standards. Ensuring that the participants and their guardians gave their informed consent before we started data collection. Gave time to make sure they comprehended the goal, parameters, and methods of the study and reaffirmed that their involvement was entirely voluntary.

Personal information and responses were kept secure and anonymous; no identifying information was shared to safeguard the respondents' identity. Strict adherence to the avoidance of harm ensured that participants experienced no emotional, psychological, or physical harm. Additionally, they received assurances that their responses would only be utilized for scholarly research.

Participants were also given the assurance that they could withdraw from the study at any moment without facing any repercussions, allowing them to make their own decisions in a comfortable manner. The study also maintained data integrity and accuracy, ensuring that all information collected was handled responsibly and reported honestly, with the findings accurately reflecting the true experiences and responses of the participants.

The study made sure it was reliable, equitable, and respected the rights and dignity of each participant by adhering to these ethical standards.

Results and Discussion

The sequence of the different issues in the problem statement is followed in the structure of this section, which is based on the pertinent subjects. In this section, the information collected from the respondents was shown, examined, and explained. Standard deviations, mean tables, frequency distributions, and correlation analyses were used to examine the data.

Table 2. *Respondents' age-based demographic profile*

<i>Age</i>	<i>f</i>	<i>%</i>
Age Ten	0	0
Age Eleven	93	83.0
Age Twelve	14	12.5
Age Thirteen	5	4.5
Age Fourteen	0	0
Age Fifteen	0	0
Total	112	100.0

A clear age distribution among the participants was shown by the demographic profile of the respondents, which is displayed in Table 2. 93 people, or 83.0% of the sample, were 11 years old, making up the bulk of responders. This high level of focus in the 11-year-old group raises the possibility that the viewpoints and experiences of this age group will have a substantial influence on the study's conclusions.

On the other hand, just 14 responders, or 12.5% of the sample, were 12 years old. Only five 13-year-olds made up the smallest group, which made up 4.5% of the total sample. Interestingly, none of the responders were between the ages of 10 and 14, leaving those categories empty.

In total, the demographic analysis involved 112 respondents, ensuring 100% representation of the age distribution. The information indicates a pronounced bias in favor of younger participants, particularly those under the age of eleven, which could affect the study's conclusions and their applicability in other contexts.

Table 3. *Demographic profile of the respondents in terms of gender*

<i>Gender</i>	<i>f</i>	<i>%</i>
Boy	55	49.1
Girl	57	50.9
Total	112	100.0

A virtually equal distribution of participants by sex was found in the demographic features of the respondents, as displayed in Table 3. Out of the 112 total respondents, there was a slight majority of females, with 57 individuals (50.9%), while males accounted for 55 participants (49.1%). According to the data, there is a pretty equal representation of both sexes in the study, which is helpful for

integrating different perspectives from participants who are both male and female. Such demographic balance helps strengthen the validity of the findings by offering insights that reflect the experiences of both genders.

Table 4 displays the respondents' demographic profile according to their religious affiliation.

Table 4. *Respondents demographic profile in terms of religious affiliation*

<i>Religious Affiliation</i>	<i>f</i>	<i>%</i>
Roman Catholicism	50	44.6
Baptist	19	17.0
Seventh Day Adventist	7	6.3
Jehovah's Witnesses	2	1.8
Iglesia ni Cristo	12	10.7
Others	22	19.6
Total	112	100.0

A thorough summary of the respondents' religious affiliations is provided by the data in Table 4. Out of the total 112 participants, the majority identified as Roman Catholic, making up 44.6% ($f = 50$) of the sample. Following that, 19.6% ($f = 22$) of the respondents reported affiliation with other religions. The Baptist denomination accounted for 17.0% ($f = 19$), while 10.7% ($f = 12$) identified with the Iglesia ni Cristo.

Other religious affiliations were less represented, with 6.3% ($f = 7$) identifying as Seventh Day Adventists and only 1.8% ($f = 2$) as Jehovah's Witnesses. Roman Catholicism is the predominant religion among the participants, while this distribution acknowledges the existence of a wide variety of other religions. This diversity highlights the complex nature of religious identity within the respondent group

Table 5 Displays the demographic profile of the respondents based on their monthly income.

Table 5. *Demographic profile of the respondents in terms of monthly income*

<i>Monthly income</i>	<i>f</i>	<i>%</i>
5,00 & below	80	71.4
5,001 – 10,000	4	3.6
10,001 – 20,000	0	0
20,001 – 30,000	0	0
30,001 – 40,000	28	25.0
40,001 – 50,000	0	0
50,001-100,000	0	0
100,001 Up	0	0
Total	112	100.0

Table 5's demographic information showed the respondents' income distribution and showed a notable concentration of low-income households. One startling discovery was that the vast majority of respondents (71.4%) stated that they earned at least five thousand pesos every month ($f = 80$), highlighting financial constraints as a common challenge for the majority of those surveyed.

The next most common income group was between 30,001 and 40,000 pesos, which made up 25.0% of the respondents ($f = 28$), suggesting that while most individuals fell into the low-income category, there was also a small segment with slightly higher earnings. Only a very small portion (3.6%, $f = 4$) of respondents earned between 5,001 and 10,000 pesos, reflecting limited financial mobility within the lower middle class.

Notably, there were no respondents in the income ranges of Ten thousand one to Twenty thousand pesos; twenty thousand one to thirty thousand pesos; forty thousand one to fifty thousand pesos; fifty thousand one to one hundred thousand pesos; or one hundred thousand one pesos and over, as all these categories had no representation ($f = 0$). This absence strongly reinforces the idea of a low-income demographic within the respondent group.

The data suggested that limited financial resources were a significant challenge for many participants, likely affecting their quality of life, access to essential services, and overall well-being. Comparing this data with national income distribution statistics from the Philippine Statistics Authority (PSA, 2018) could offer a broader perspective and help understand the socioeconomic landscape, especially in relation to poverty levels and income disparities.

Further context might be obtained by examining the PSA's Family Earnings and Expenditure Survey (FIES), which would make comparisons easier and give a deeper understanding of the financial hardships faced by comparable populations in the Philippines.

In conclusion, the data pointed to widespread economic hardship within the sample, the requirement for focused financial and social assistance to deal with these issues.



Table 6 Displays the participants' demographic profile according to the size of their households.

Table 6. *Demographic profile of the participants according to the size of their household*

Household size	f	%
One to three persons	18	16.1
Four to six persons	85	75.9
Seven to nine persons	9	8.0
Total	112	100.0

The distribution of participants by household size was shown in detail in Table 6. The findings showed that the vast majority of participants, comprising 75.9% (f = 85), lived in households with four to six members. In contrast, a smaller portion, 16.1% (f= 18), originated from one- to three-person homes. Households with seven to nine individuals were the least common among respondents, making up only 8.0% (f = 9) of the entire sample. In total, 112 respondents participated, representing 100.0% of the sample population. This distribution suggested a trend toward medium-sized households among the respondents, reflecting certain demographic characteristics.

Table 7 Gives an indication of the level of critical thinking of the sixth-grade students at Araling Panlipunan.

Table 7. *Level of critical thinking skills of the sixth-grade students at Araling Panlipunan.*

Indicator	Mean	SD	Interpretation
I am able to relate what the instructions mean to actual circumstances	4.04	0.770	Proficient
I am able to analyze and compare conflicting viewpoints	4.04	0.734	Proficient
I can see how the lessons taught by Araling Panlipunan apply to everyday situations.	3.98	0.794	Proficient
I am able to relate ideas to my own life events.	3.95	0.733	Proficient
I am able to recognize and assess a concept's advantages.	3.95	0.721	Proficient
Overall	3.99	0.569	Proficient

Legend: 4.20 to 5.00, Exemplary; 3.40 to 4.19, Proficient; 2.60 to 3.39, Competent; 1.80 to 2.59, Emerging; 1.00 to 1.79, Insufficient

With an overall high mean score of 3.99 and a standard deviation of 0.569, the results from Table 7 proved that Grade 6 students in Araling Panlipunan had a great degree of higher-order thinking skills (HOTS). This indicated a general proficiency in critical thinking among the respondents. Two specific indicators stood out with the highest mean scores of 4.04, which reflected the learners' abilities to apply critical thinking in practical contexts.

The ability to relate ideas to everyday events suggested that students were effectively linking their academic learning to everyday experiences. Likewise, the skill to compare and evaluate opposing ideas demonstrated their analytical abilities and openness to different viewpoints.

Conversely, the metrics with the smallest average scores (both 3.95) were related to linking concepts to personal experiences and identifying the strengths of a concept. Although these scores were the lowest in the dataset, they still indicated a high level of proficiency, as they remained within the "proficient" category. This consistency across different skills suggested that learners had a solid understanding of critical thinking, even though these specific areas were slightly less developed.

Overall, the results showed that students in Araling Panlipunan were extremely skilled in applying critical thinking abilities, notably in analytical reasoning and real-world applications. This showed a good trend in the development of higher-order thinking skills, which are crucial for both academic and personal progress.

In a parallel study, Lopez (2019) evaluated the critical-thinking abilities of sixth-grade students Araling Panlipunan in Catanduanes Division. Data for this descriptive study was collected from sixty-three public elementary school students. According to the results of the pre- and post-learning evaluations, the majority of the respondents only showed a satisfactory degree of analytical thinking abilities.

Table 8 Gives an indication of the level of analytical thinking of the sixth-grade students at Araling Panlipunan

Table 8. *Level of analytical thinking skills of the sixth-grade students at Araling Panlipunan.*

Indicator	Mean	SD	Interpretation
I am able to evaluate the reliability of the Araling Panlipunan lesson	4.25	0.691	Exemplary
I am able to consider the effects of teaching	4.21	0.796	Exemplary
I am able to consider what instruction means	4.14	0.847	Proficient
I am able to evaluate the flaws in some arguments	4.13	0.840	Proficient
I am able to contrast concepts found in Araling Panlipunan instruction	4.05	0.957	Proficient
Overall	4.16	0.594	Proficient

Legend: 4.20 to 5.00, Exemplary; 3.40 to 4.19, Proficient; 2.60 to 3.39, Competent; 1.80 to 2.59, Emerging; 1.00 to 1.79, Insufficient

The results shown in Table 8 demonstrate how well Grade 6 students in Araling Panlipunan exhibit higher-order thinking skills (HOTS), especially analysis. With a 0.594 standard deviation and an average score of 4.16, it can be concluded that the students had a solid foundation in analytical thinking, which is essential for comprehending and interpreting complex information.

"I am able to evaluate the reliability of the Araling Panlipunan lesson" (mean = 4.25, SD = 0.691) is the indicator with the highest score, suggested that the students were skilled at critically evaluating the accuracy of the information provided to them. This ability is crucial for developing well-informed, discerning learners who can navigate through different sources of information and extract meaningful insights.

The second-highest mean score, "I am able to consider the effects of teaching" (mean = 4.21, SD = 0.796), came in close succession which demonstrated that students not only analyzed content but also considered its broader implications. This kind of reflective thinking indicated that learners were deeply engaged with the material, understanding that learning extends beyond memorization to practical, real-world applications.

Conversely, the indicators with the lowest average scores were "I am able to evaluate the flaws in some arguments" and "I am able to contrast concepts found in Araling Panlipunan instruction" (mean = 4.05, SD = 0.957). (Mean = 4.13, SD = 0.840)—still fell within the "proficient" category. Though slightly less developed compared to the other skills, these indicators still showcased a commendable level of analytical thinking.

In a related study, Apuyao (2018) investigated the critical thinking abilities of Agusan del Sur sixth-grade students during Araling Panlipunan lessons and conversations. Apuyao collected data from 113 chosen students in different primary schools throughout the province using a descriptive research design. Based on classroom observations and oral assessments, the results showed that 54% of respondents only exhibited a satisfactory degree of critical thinking abilities. According to the study, the students' poor study habits, poor comprehension abilities, and limited memory of Araling Panlipunan concepts were the main causes of their poorer critical thinking scores.

Table 9 Gives an indication of the comprehension level of the sixth-grade students at Araling Panlipunan.

Table 9. *Level of comprehension skills of the grade six learners in Araling Panlipunan.*

<i>Indicator</i>	<i>Mean</i>	<i>SD</i>	<i>Interpretation</i>
I am able to comment on what I have read	4.02	0.849	Proficient
I am able to comprehend the elements of Araling Panlipunan instruction	3.95	0.847	Proficient
I am able to critically comprehend what Araling Panlipunan instruction means.	3.83	0.815	Proficient
I am able to literally interpret the text in Araling Panlipunan	3.81	0.954	Proficient
I am able to draw conclusions from Araling Panlipunan lessons	3.79	0.941	Proficient
Overall	3.88	0.614	Proficient

Legend: 4.20 to 5.00, Exemplary; 3.40 to 4.19, Proficient; 2.60 to 3.39, Competent; 1.80 to 2.59, Emerging; 1.00 to 1.79, Insufficient

With an overall mean score of 3.88 and a standard deviation of 0.614, the results of the analysis of the higher-order thinking skills (HOTS) in Araling Panlipunan among Grade 6 students are shown in Table 9. These results indicate a generally strong level of comprehension. This implies that the pupils have a firm grasp of the main ideas and information presented in the learning area.

One particularly noteworthy sign was "I am able to comment on what I have read," which obtained a standard deviation of 0.849 and the highest mean score of 4.02. This score highlighted that the learners were particularly adept at expressing their thoughts, reactions, and insights about the texts they engaged with, demonstrating a strong ability to interact critically with the material.

However, with a mean score of 3.79 and a standard deviation of 0.941, the indicator "I am able to draw conclusions from Araling Panlipunan lessons" had the lowest score. Even while this score is still in the "Proficient" range, it indicated that students had a little more difficulty deriving deeper inferences or extrapolating meanings from the text that weren't addressed directly. This discrepancy between the highest and lowest-scoring indicators points to an area where instructional strategies could be improved, especially those aimed at enhancing inferential thinking skills.

Overall, the results suggested that while Grade 6 learners excelled in providing feedback and engaging with content articulately, there was room for further development in their ability to make inferences. Educators might focus on enhancing these inferential skills through targeted activities and discussions, aiming to foster a deeper, more comprehensive understanding of Araling Panlipunan.

Geraldo (2021) assessed the state and development of Grade 6 students' higher-order thinking skills (HOTS) during Araling Panlipunan instruction in a related study. Data was gathered through survey questionnaires from 80 purposefully chosen Grade 6 students in the Agusan del Sur Division using a descriptive study methodology. The results showed that 54% of the respondents had low scores on pre-learning tests, indicating poor higher-order cognitive abilities. The study also identified deficiencies in the students' critical thinking and critical comprehension abilities.

Talento (2019), on the other hand, focused on developing intervention materials while investigating the elements impacting intermediate-grade students' development of higher-order thinking powers. A mixed-method approach was taken in this study, integrating qualitative and quantitative research techniques. In Araling Panlipunan, data were collected from 15 students who were chosen because they were found to have the lowest levels of competency and higher-order thinking abilities mastery. According to the findings, all of the respondents' learning competencies and higher-order thinking skills fell into the critical or frustrated category. Additionally, the survey found that the respondents found the most difficult skills to be problem-solving, critical and analytical thinking, and understanding instructional meanings.

Table 10 Gives an indication of the level of reasoning skills of the sixth-grade students at Araling Panlipunan.

Table 10. *Level of the reasoning skills of the grade six learners in Araling Panlipunan.*

<i>Indicator</i>	<i>Mean</i>	<i>SD</i>	<i>Interpretation</i>
I am able to rationally support or refute Araling Panlipunan ideas	4.23	0.684	Exemplary
I am able to completely understand the issue that I must defend	4.19	0.717	Proficient
I am able to use reason and reasoning to support the issue	4.19	0.729	Proficient
I can provide proof to support my explanation	4.06	0.774	Proficient
I can provide specific examples	4.06	0.774	Proficient
Overall	4.15	0.485	Proficient

Legend: 4.20 to 5.00, Exemplary; 3.40 to 4.19, Proficient; 2.60 to 3.39, Competent; 1.80 to 2.59, Emerging; 1.00 to 1.79, Insufficient

The findings in Table 10 highlight the general higher-order thinking skills (HOTS) competency of Grade 6 students in the context of Araling Panlipunan, with an emphasis on reasoning abilities. With a standard deviation of 0.485 and an overall mean score of 4.15, the students showed outstanding competency in these areas on average.

One particular statement, "I am able to rationally support or refute Araling Panlipunan ideas", had the highest mean score (4.23) and standard deviation (0.684), indicating "Exemplary" level. This result illustrates that students were highly capable of critically engaging with different perspectives and effectively constructing reasoned arguments.

The indicators that scored the lowest, "I can provide proof to support my explanation" and "I can provide specific examples," both of which had mean scores of 4.06 with a standard deviation of 0.774, were nevertheless classified as "Proficient" but indicated that students might have greater difficulty with these areas than with other reasoning skills. This implies that although the students were able to express their ideas clearly, they would have benefited from additional practice and direction in providing specific facts and evidence to back up their claims.

Overall, while Grade 6 learners showed strong reasoning abilities, particularly in making arguments and engaging critically with different viewpoints, they still need to work on developing explanations that are supported by facts and evidence. This insight could help guide educators to focus on strengthening these areas, enhancing students' critical thinking and reasoning skills within the field of Araling Panlipunan.

The effect of classroom debates on the reasoning abilities of Grade 5 students in Araling Panlipunan was investigated by Lim (2018) in a similar study. Ninety-four chosen students from Bago City's public primary schools participated in the study. Data was gathered via oral evaluations and survey questionnaires. The results showed that during debates in the classroom, the majority of respondents demonstrated extremely weak reasoning abilities. The study identified that learners' negative attitudes toward Araling Panlipunan instruction and their lack of initiative in retaining and understanding concepts were significant factors contributing to this struggle.

Table 11 Shows the analysis of significant correlations between the respondents' level of higher-order thinking skill development and their demographic profile, including age, sex, religious affiliation, family monthly income, and household size.

Table 11. *Significant Correlation between the demographic profile of respondents in terms of: age; sex; religious affiliation; family monthly income; and household size and the level of development of the higher order thinking skills*

<i>Indicator</i>	<i>Mean</i>	<i>SD</i>	<i>Interpretation</i>
Age	.039	.680	Not Significant
Sex	-.068	.473	Not Significant
Religious Affiliation	-.092	.334	Not Significant
Monthly Income	.119	.126	Not Significant
Household Size	.027	.775	Not Significant

According to the data in Table 11, there were no statistically significant correlations between the respondents' development of higher-order thinking skills and the demographic characteristics of age, sex, religious affiliation, family monthly income, and household size. Each demographic variable's correlation coefficient and p-value are as follows: Age: $r = 0.039$, $p = 0.680$; Sex: $r_{pb} = -0.068$, $p = 0.473$; Religious Affiliation: $r_{pb} = -0.092$, $p = 0.334$; Monthly Income: $r = 0.119$, $p = 0.126$; Household Size: $r = 0.027$, $p = 0.775$. Since all p-values were higher than the usual significance level of 0.05, it appears that these demographic characteristics had no

discernible effect on the growth of higher-order cognitive abilities. Therefore, the data was insufficient to refute the null hypothesis, which claims that these demographic characteristics have no bearing on the degree of development of higher-order thinking abilities. This result implies that, within the parameters of this investigation, the growth of higher-order cognitive abilities seems to be unaffected by the demographic traits looked at.

Conclusion

Based on the study's findings, it can be concluded that Grade 6 students in Araling Panlipunan have developed a strong foundation in higher-order thinking skills (HOTS), particularly in the areas of critical and analytical thinking, understanding, and reasoning. While their ability to evaluate content and make real-life connections is commendable, there remain areas for improvement, especially in drawing inferences and providing evidence-based explanations. Notably, demographic characteristics such as age, sex, religion, income level, and family size showed no significant influence on students' HOTS, suggesting that instructional methods and learning experiences play a more vital role in shaping cognitive development than socioeconomic background. This underscores the importance of prioritizing effective, inclusive, and inquiry-based teaching practices that can empower learners regardless of their personal circumstances.

In light of these conclusions, it is recommended that schools ensure equitable access to high-quality instruction and resources, particularly for students from low-income households. Educators should adopt differentiated and interactive teaching strategies that promote evidence-based reasoning and inferential thinking, while fostering inclusive classroom environments that embrace cultural and religious diversity. Stakeholders are encouraged to support professional development focused on inquiry-driven pedagogy and critical thinking integration in Araling Panlipunan. Furthermore, future research should explore innovative teaching approaches and the integration of technology and culturally relevant materials in enhancing HOTS, extending the inquiry across various grade levels and student populations to identify scalable and effective practices in social studies education.

References

- Apuyao, Bernie L. (2018). The Level of Critical Thinking Skills Honed among the Grade Six Pupils of Agusan del Sur during Araling Panlipunan Instructional Activities and Discussions. Thesis. Agusan del Sur College.
- Brookhart, S. M. (2018). "How to assess higher-order Thinking Skills in your Classroom."
- Capinig, Dha (2019). Teaching Araling Panlipunan. Retrieved on July 2, 2020 from <https://www.scribd.com/document/33327043-teaching-araling-panlipunan>,
- Cardigan, Solice G. (2016). Learning Skills, Materials and Resources in Social Studies. The Social Science Pedagogue. Volume 1. pp 98-99. Khazar University Press. Azerbaijan.
- Dames, Freida O. (2018). Challenges and Hurdles against the Improvement of the Reasoning Skills in Social Studies of the Grade Five Pupils: Basis for Intervention Materials. Thesis. Ilagan City Campus. Ilagan City.
- Darci, Reiven M. (2018). Cognitive and Motivational Factors that Affect the Critical Thinking Skills in Social Studies of the Grade Five Learners. Thesis. Cagayan State University.
- Foster, Lance L. (2018). Social Science Skills, Competencies, Goals. Social Science Journal Volume 2. pp 68-70. University of Valle Publishing Program
- Garcia, Edalaida D. (2019). How to Motivate Students to Love Araling Panlipunan. Retrieved on July 2, 2020 from <https://www.pressreader.com/philippines/sunstar/pampanga>
- Geraldo, Imee J. (2021). Status and Progress of the Higher Order Thinking Skills of the Grade Six Learners Applied in Araling Panlipunan Instruction and Learning Process. Thesis. Agusan del Sur College.
- Gulistan, M.A et al (2018) "Higher Order Thinking Skills Among Secondary School Students in Science Learning". The Malaysian Online Journal of Educational Science.
- Legaspi, Rene S. (2019) Most Appropriate Strategies in Araling Panlipunan. Retrieved on July 2, 2020 from www.deped.bataan.com/resources/ap/most-appropriate-strategies
- Lim, Arsen Y. (2018). Effects of Engagement in Classroom-based Debates to the Reasoning Skills in Araling Panlipunan of the Fifth Grade Learners. Thesis. Bago City College.
- Lopez, Janette H. (2019). Assessment of the Analytical Thinking Skills in Araling Panlipunan of the Selected Grade Six Pupils in the Division of Catanduanes. Thesis. Catanduanes State University.
- Lorbis, John Carlo C. (2019). Utilization of Contextualized Teaching and Learning (CTL) Approach in Grade Two Araling Panlipunan. Retrieved on March 2, 2022 from files.eric.ed.gov/fulltext/ED603874.pdf

Macarandan, Rose Marie S. (2014). Assessment of the Araling Panlipunan Modules in the K-12 Curriculum: Enhanced Instructional Materials Development. Retrieved on March 12, 2022 from icehm.org/upload/2055ED0514045.pdf

Misola, Edelyn L. (2017). The Effects of Reporting and Discussions on Current Events during Araling Panlipunan Instruction to the Analytical Thinking Skills of the Learners. Thesis. Isabela Colleges. Cauyan City. Isabela.

Otelo, William M. (2018). Social Science Learning Skills and Competencies. *The Modern Journal of Education and Society*. Volume 1. pp 110-113. Palacky University Press. Czech Republic.

Park, Marie Rosenthal V. (2017). ICT-Based Social Science Learning Competencies. *Journal of Developmental Social Science Education*. Volume 2, pp 124-125. University of Ottawa Press. Canada,

Perez, Trish C. (2020). The Comparative Levels of Critical Thinking Skills of Intermediate Grade Learners between Individualized and Collaborative Learning Activities in Araling Panlipunan. Thesis. Iligan Capitol College.

Scoth, Jaynica P. (2017). Decision Making and Problem-Solving Competencies of Social Science Learners. *Essentials of Sociology*. Volume 4. pp 99-101. University of Alberta Press., Social Science

Talento, Arvin H. (2019). Factors Affecting the Development and Improvement of the Higher Order Thinking and Learning Skills of the Intermediate Grade Learners: Basis for Intervention Materials. Thesis. Guimaras State College.

Tejada, Junila (2017). Teaching and Learning Araling Panlipunan. Retrieved on July 2, 2020 from <https://www.slideshare.net/junilatejada/araling-panlipunan>.

Affiliations and Corresponding Information

Rose Marie B. Fernandez

Logdeck Elementary School

Department of Education – Philippines

Larry R. Labay

Valencia Colleges (Bukidnon) Inc. – Philippines