



# PROMOTING CIVIC ENGAGEMENT IN SOCIAL STUDIES FOR GRADE 5 LEARNERS: BASIS FOR TEACHERS DEVELOPMENT PROGRAM

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## **Abstract :**

This study evaluated the performance of Grade 5 learners at Magalong Elementary School, Mabini District, Schools Division Office I Pangasinan, in the Achievement Test for the School Year 2023-2024. It also assessed the validity and reliability of the achievement test based on the indices of difficulty and discrimination. The findings were utilized to propose a development plan for enhancing civic engagement in Araling Panlipunan for Grade 5 learners.

A descriptive research method was employed. The researcher followed the steps to construct a valid and reliable test, considering the needs of Grade 5 learners in Araling Panlipunan. Initially, test items were created and subjected to face validation for improvement, followed by a trial run for item analysis to determine indices of difficulty and discrimination, further refined based on the results, and finally tested for reliability.

The analysis included the test results of ninety-five (95) learners in the Araling Panlipunan achievement test. These results formed the basis for developing and proposing a new achievement test aimed at promoting civic engagement among Grade 5 learners.

Data analysis tools included the mean, mean percentage score, index of difficulty, index of discrimination, and Pearson r. The findings were as follows:

**Performance Level of Grade 5 Learners in Araling Panlipunan Achievement Test.** The overall performance level was low, with a computed mean score of 24.48, translating to a mean percentage score of 48.96%. This is significantly below the Department of Education's standard mean percentage score of 75%. **Validity and Reliability of the Achievement Test, Index and Level of Difficulty:** Out of 30 items, three were very difficult, and 27 had a "moderate" index of difficulty. The highest index of difficulty was 0.74. **Index and Level of Discrimination:** Two items were "good," eleven were "reasonably good," four were "marginal," and fourteen were "poor." The item with the lowest discrimination index was 0.02.

**Proposed Achievement Test,** the new test was based on performance data and previous validity and reliability assessments. It included items with a balanced difficulty and higher discrimination.

**Validity and Reliability of the Proposed Test, the Index and Level of Difficulty:** One item was very difficult, and 29 had a "moderate" difficulty. The highest index of difficulty was 0.74. **Index and Level of Discrimination:** Two items were "good," eleven were "reasonably good," nine were "marginal," and eight were "poor." The item with the lowest discrimination index was 0.03.

**Reliability:** The computed Pearson's r of +1.24 indicated excellent reliability, suggesting the proposed test is a robust tool for assessing Grade 5 learners' civic engagement in Araling Panlipunan. Based from the findings the following conclusions were drawn: Grade 5 learners at Magalong Elementary School performed poorly in the Achievement Test. The original Achievement Test was neither valid nor reliable.

The proposed test demonstrated high reliability based on Pearson's  $r$ . Based from the conclusions the following recommendation were drawn:

School administrators should conduct in-service training to enhance the Araling Panlipunan curriculum, addressing learners' weaknesses. Teachers should attend seminars on Araling Panlipunan, with their implementation monitored and evaluated for effectiveness. A remedial instruction program should be implemented to address Grade 5 learners' weaknesses in Araling Panlipunan. Similar studies should be conducted in other schools, districts, and divisions to validate these findings. The proposed test, designed for Grade 5 learners at Magalong Elementary School, can be applied to other schools.

Other researchers can use the proposed test as a guide to develop effective civic engagement-focused achievement tests in Araling Panlipunan. By emphasizing civic engagement, this study aims to enrich the educational experience in Araling Panlipunan, fostering a deeper understanding and active participation in community and societal matters among Grade 5 learners.

## INTRODUCTION

Educators strive to make learning engaging and meaningful by adopting systematic and student-centered approaches. Araling Panlipunan (Social Studies) plays a fundamental role in fostering civic consciousness and social responsibility among learners. An increased understanding of social, historical, and cultural concepts can significantly influence learners' ability to participate actively and responsibly in their communities. This study aims to investigate and determine the level of engagement and understanding of Grade 5 learners in Araling Panlipunan and its correlation to their civic awareness and social responsibility.

Social Studies, particularly Araling Panlipunan, is more than just the memorization of historical events or geographical locations. It involves cultivating learners' ability to reason, evaluate social issues, and develop meaningful connections to their civic duties. Research indicates that many learners perceive Araling Panlipunan as mere fact memorization without appreciating its relevance to their lives. Effective understanding of this subject requires not only factual comprehension but also the ability to analyze, interpret, and articulate ideas about the relationships between past and present social issues. Ay et al. (2016) emphasize that such conceptual comprehension boosts learners' engagement and promotes lifelong learning in social studies.

The pursuit of civic engagement and social responsibility is essential for building strong communities and a well-functioning democracy. Understanding the principles of civic engagement equips learners with the ability to participate in societal decision-making processes, fostering a sense of belonging and responsibility. Targeting high expectations for learners carries the responsibility of providing meaningful learning experiences. Low engagement and understanding often lead to disengagement and missed opportunities for personal and social growth.

Quality education in Araling Panlipunan is essential for nurturing well-rounded learners. Equity in education ensures that all learners, regardless of background, have access to meaningful learning experiences. Effective instruction requires teachers to guide and facilitate learning experiences that help learners apply their knowledge to solve real-world issues. Efficiency in teaching involves fostering critical thinking and problem-solving skills. Participation ensures that learners remain engaged throughout their educational journey, culminating in responsible citizenship.

Despite the importance of civic education, research reveals that many learners struggle with conceptual understanding and practical application in Araling Panlipunan. According to Molina (2014), learners often rely on rote memorization rather than understanding the significance of historical events and social issues. Istikomah (2019) similarly emphasized that learners who develop a deeper understanding of social concepts tend to exhibit higher levels of engagement and social responsibility.

Learners who struggle with Araling Panlipunan often experience anxiety and disengagement. This study investigates strategies to promote conceptual understanding and civic engagement in Grade 5 learners at Magalong Elementary School, Mabini District. The research aims to identify the correlation between learners' understanding of social studies concepts and their level of civic engagement. The findings will serve as the basis for developing a program to foster meaningful learning experiences and promote responsible citizenship among Grade 5 learners.

## Theoretical Framework

This study seeks to promote learners' physical, emotional, social, and cognitive development. It aims to cultivate curiosity, critical thinking, and self-discipline in learners while fostering their capacity to relate positively to family members, peers, and the broader community. By establishing patterns of success and self-confidence, learners can develop constructive attitudes towards society and contribute positively to community development.

Presidential Decree 603 (The Child and Youth Welfare Code of the Philippines) underscores the importance of protecting and nurturing children as vital assets of the nation. Article 73 of the decree highlights the need for educational programs that support the holistic development of children, including civic education. Furthermore, Article 75 emphasizes the responsibility of providing adequate educational facilities to promote learners' physical and social development.

Similarly, Batas Pambansa 232 (The Education Act of 1982) in Section 9 emphasizes learners' right to receive relevant and quality education aligned with national goals. This education should foster the development of learners as dignified and responsible citizens.

## Conceptual Framework

The 1987 Constitution of the Republic of the Philippines, particularly Section 1, mandates the state to protect and promote the right of all citizens to quality education at all levels. Article 2, Section 5 highlights the state's role in promoting the physical, intellectual, and social well-being of the youth, recognizing their vital role in nation-building.

There are growing concerns that a lack of contextualized and inquiry-based learning strategies in Araling Panlipunan may hinder learners' ability to develop critical thinking skills and civic awareness. Sullivan et al. (2020) suggest that explicit instruction combined with meaningful discussions fosters deeper understanding and engagement. Russo and Hopkins (2017) emphasize the

importance of post-task discussions, where learners can share insights and learn from one another, fostering a collaborative learning environment.

Educational experts have long noted that entry-level education is a crucial phase in a child's schooling. Oreta (2003) stressed that establishing strong foundational learning experiences is essential for improving the quality of basic education. Division Memorandum No. 97, s. 2003 underscores the importance of effective teaching strategies to address the diverse needs of learners, particularly in underprivileged areas.

Kitchen (2003) argues that gaps in foundational knowledge can hinder learners' ability to succeed in secondary education. In underprivileged areas, learners may face challenges such as household responsibilities and limited parental support, which can impact their academic performance and engagement in social studies. Addressing these gaps through meaningful and inclusive educational programs can help learners develop critical thinking skills and foster a sense of civic responsibility.

This study underscores the importance of promoting civic engagement in Araling Panlipunan for Grade 5 learners. By fostering a deeper understanding of social concepts and encouraging active participation, learners can develop the skills and values necessary for responsible citizenship. The findings of this research will serve as the basis for a developmental program aimed at enhancing civic engagement and social responsibility among Grade 5 learners.

### Statement of the Problem

This study focuses on the development of civic engagement in Araling Panlipunan for Grade 5 learners in Magalong Elementary School, Mabini District, Schools Division Office I Pangasinan during the School Year 2023-2024.

Specifically, this study sought to answer the following sub-problems:

1. What is the level of civic engagement of the Grade 5 learners in Araling Panlipunan based on the results of assessments and participatory activities?
2. How valid and reliable are the assessment tools for promoting civic engagement in Araling Panlipunan for Grade 5 learners in terms of the following:
  - a. Content coverage/table of specification
  - b. Index and level of difficulty
  - c. Index and level of discrimination
3. What is the reliability and effectiveness of Araling Panlipunan assessment tools?
4. What is the final form of the valid and reliable assessment tools for promoting civic engagement in Araling Panlipunan for Grade 5 learners?

### Basic Assumptions

This study is anchored on the following basic assumptions:

1. The implementation of Araling Panlipunan as a component of the K-12 curriculum supports the development of civic engagement among learners.
2. There is a need for primary teachers to be trained in the effective implementation of civic engagement strategies in Araling Panlipunan.

### Scope and Delimitation

This study aims to evaluate the teaching of Araling Panlipunan as a component of the K-12 curriculum using assessment tools and participatory activities as the main data-gathering instruments.

The respondents will be limited to the Grade 5 learners in Magalong Elementary School, Mabini District.

### Importance of the Study

The findings from this study are beneficial to various stakeholders in improving civic engagement among social studies learners. These stakeholders include teachers, learners, curriculum planners, textbook writers, government, and society at large. The study will help teachers in the proper implementation of the curriculum by incorporating strategies that promote civic engagement.

This study will help learners develop a deeper understanding of their role as responsible citizens and appreciate the importance of their active participation in social studies activities. This may help them acquire both civic knowledge and social skills that will enhance their capacity for meaningful engagement in community activities.

It will also provide curriculum planners with insights on how to integrate civic engagement strategies into the Araling Panlipunan curriculum. The government and other educational authorities may realize the importance of organizing seminars and regular workshops on civic engagement to educate in-service teachers on effective strategies.

## RESEARCH METHODOLOGY

This study employed the descriptive method of research in determining the level of performance of the Grade 5 learners in the Araling Panlipunan achievement test during the school year 2023-2024. This is sought to determine the validity and reliability of the achievement test used in Grade 5 classes in terms of index and level of difficulty and index and level of discrimination. The results were used as basis for the development and validation of achievement test for Grade 5 learners. It can be said therefore that this study used the descriptive-developmental method of research with the development of the materials following the scientific steps in the development of a good achievement test.

### Sources of Data

The research subjects who served as the source of data in this study were the 95 Grade 5 learners in Magalong Elementary School, Mabini District. They represent 100 percent of the total population of the Grade 5 classes.



## Instrumentation and Data Collection

The researcher asked permission to use the test results of the Grade 5 learners in Araling Panlipunan Achievement test which were tallied, tabulated and statistically treated.

The level of performance in Araling Panlipunan of the Grade 5 learners in Magalong Elementary School, Mabini District, based on the results of their Achievement Test during the school year 2023-2024 was first determined. The validity and reliability of the utilized achievement test were also determined.

Based on the level of the performance of the Grade 5 learners, a proposed achievement test was developed, tested and validated.

## Tools for Data Analysis

The following statistical tools were used:

1. Mean- in finding the mean the formula used is;

$$x = \frac{AM + (\sum f d)i}{N}$$

Where:

|           |   |                                                     |
|-----------|---|-----------------------------------------------------|
| X         | = | the mean                                            |
| AM        | = | the assumed mean                                    |
| $\sum fd$ | = | summation of the product of frequency and deviation |
| N         | = | the number of learners                              |
| i         | = | interval                                            |

The performance level of the learners is determined by the mean percentage score with their formula:

$$MPS = \frac{x}{HPS} \times 100$$

Where:

MPS= Mean Percentage Score  
X= the mean  
HPS= Highest Possible Score

The computed mean percentage scores were compared to 75 percent, the desired performance level set by the Department of Education.

The validity and reliability of the test instrument were determined in terms of its index and level of difficulty, its index and level of discrimination and its consistency.

Validity means the degree to which a test or measuring instrument, measures what it intends to measure. In other words, there is veracity or truthfulness of the responses.

2. Index of Difficulty To answer in part sub-problem 2 and 4, the index of difficulty of the achievement test items and that of the proposed achievement test was determined. The index of difficulty of the items in the achievement test utilized by the Grade 5 teachers in Aguilar and that of the proposed achievement test in the first try-out and of those in the second try-out to answer sub-problem 2 and 4 was likewise determined.

The researcher used the following steps in solving the difficulty;

- a. The scores of the learners were arranged from highest to lowest.
- b. Determine the upper scoring group by multiplying the total number of examinees by 27 percent. The upper 27 scoring group were considered the upper group and the lower 27 percent comprised the lower scoring group.
- c. The number of learners in the upper and lower scoring groups who answered the particular item correctly were added and the sum of which was divided by the total number of examinees.

The formula is:

$$P = \frac{U+L}{N}$$

where:

P= index of difficulty  
U = upper 27 percent of the total number of learners who answered a particular item correctly  
L = lower 27 percent of the total number of learners who answered a particular item correctly.  
N = number of examinees

In the interpretation, an index of difficulty ranging from 0-0.20 percent denoted a "very difficult item" that should be discarded outright. An index of difficulty ranging from 0.21-0.80 denoted "moderately difficulty item." A moderately difficult item according to Garrett (1974) has an average difficulty and is considered a good item. An item with an index of difficulty ranging from 0.81 and higher denoted an easy "item." An easy item is a poor item that should be included in the final draft of the test.

Difficulty refers to the percentage of getting the right answer of each item. The smaller the percentage the more difficult the item is. Majority criterion (50% plus one) is the basis of interpreting the index of difficulty.

3. Index of Discrimination. Similarly, to answer in part sub-problem 2 relative to the index of difficulty of the achievement test items and that of the items in the proposed achievement test in the first and second try-outs to answer in part sub-problem 2 and 4, was likewise determined. this was derived by subtracting the number of learners in the lower group who answered a particular item correctly, from the upper scoring group and the difference of which was divided by the number of cases.

$$\text{Index of Discrimination} = \frac{RU - RL}{N}$$

where:

RU= right responses of the upper group

RL= right responses of the lower group

N= number of learners in each group

For the interpretation, an item of 0-0.19 denoted a poor item, 0.20 to 0.29 indicated a marginal item, 0.30 to 0.39 indicated a reasonably good and 0.40 and higher, denoted a good item.

A maximum positive discriminating power is revealed by an index of 100. This is obtained only when at the upper group learners chose the correct answer and not in the lower group. Test makers are advised to prepare items at 50% level of difficulty in order that maximum discrimination power can be attained.

Negative discriminating power is obtained when more learners in the lower group get the right answer than the upper group. Moreover, a zero-discriminating power (0.00) is obtained when an equal frequency of the upper and lower groups gets the correct answer. The item having negative and zero discrimination should be improved.

4. Reliability is another quality of a good test in research that is concerned with testing. It refers to the degree of consistency that the results show in two administrations of the test. The scores in the two test administrations showing them to be the same or almost the same manifest this.

There are four methods in testing the reliability of a good instrument test. These methods are: test-retest method; parallel-forms method; split-half method; and internal consistency method.

The researcher opted to use test-retest reliability. In order to measure the test-retest reliability, we have to give the same test to the same test respondents on two separate occasions. The scores on the two occasions are then correlated. This correlation is known as the test-retest reliability coefficient or the coefficient of stability.

The closer each respondent's scores are on the first and second try-outs, the more reliable the test measure and the higher the coefficient of stability will be.

The Pearson correlation coefficient is utilized to measure the retest correlation.

$$r = \frac{\sum xy - \frac{(\sum x)(\sum y)}{N}}{\sqrt{\left(\sum x^2 - \frac{(\sum x)^2}{N}\right)\left(\sum y^2 - \frac{(\sum y)^2}{N}\right)}}$$

where:

r= Pearson r

$\sum X$ = the sum of scores in the X distribution

$\sum Y$ = the sum of the scores in the Y distribution

$\sum XY$ = the sum of the products of paired X- and Y- distribution

$\sum X^2$ = the sum of the squared scores in X- distribution

$\sum Y^2$ = the sum of the squared scores in Y- distribution

N= the number of the paired X- and Y- scores (subjects)

In the interpretation of the coefficient of stability, the following guidelines can be used:

- 0.9 and greater: Excellent reliability
- Between 0.9 and 0.8 : Good reliability
- Between 0.8 and 0.7: Acceptable reliability
- Between 0.7 and 0.6 : Questionable reliability
- Between 0.6 and 0.5: Poor reliability
- Less than 0.5: Unacceptable reliability

## RESULTS AND DISCUSSION

The data gathered on the performance level of the Grade 5 learners in Magalong Elementary School, Mabini District in Araling Panlipunan based on the results of their Achievement Test, 2023-2024. The data gathered were analyzed and interpreted and served as the basis for the development of achievement test in the teaching of Araling Panlipunan.

**Table 1**  
**The Level of Performance of the Grade 5 Learners**  
**in the Araling Panlipunan Achievement Test**

| Class Interval                     | F                                  | D                           | Fd |
|------------------------------------|------------------------------------|-----------------------------|----|
| 35-39                              | 11                                 | 3                           | 6  |
| 30-34                              | 15                                 | 2                           | 4  |
| 25-29                              | 39                                 | 1                           | 15 |
| 20-24                              | 10                                 | 0                           | 0  |
| 15-19                              | 7                                  | -1                          | -5 |
| 10-14                              | 8                                  | -2                          | -8 |
| 5-9                                | 5                                  | -3                          | -6 |
| <b>N=95</b><br><b>Mean = 24.48</b> | <b>Σfd= 56</b><br><b>MPS=48.96</b> | <b>DepEd Standard = 75%</b> |    |

**Legend:**

F= frequency distribution of scores

d= deviation

fd= frequency deviation

Σ= sum of

N= Number of Cases

MPS= Mean Percentage Score

**Performance Level of the Grade 5 Learners in Araling Panlipunan in the Achievement Test**

As seen in Table 1 above, the mean percentage score of the Grade 5 learners was 24.48 equivalent which is equivalent to 48.96 percent. This is far from the 75 percent mastery level set by the Department of Education. This showed that the Grade 5 learners had a low performance in Araling Panlipunan Achievement.

One factor that contributes to the learners' low performance is their socio-economic status. Socio-economic status is determined to be a predictor of Araling Panlipunan achievement. As stated in the study of Saritas and Akdemir (2009), studies repeatedly discovered that the parents' annual level of income is correlated with student's math achievement scores (Eamon, 2005; Jaynes, 2002; Hochschild, 2003; Mcneal, 2001). Socio-economic status was found significant in primary math and sciences achievement scores (Ma and Klinger, 2000).

Parents with high income seem to provide richer instructional resources to their children which may eventually help to improve the math scores of students. As the grade level increases, math students' opinions about the effects of socio-economic status on the math achievement increases. Deficiency of financial resources is reported as a factor that has an effect on their math achievement.

Another factor is the study habits of the learners. Camahalan (2006) revealed on his research study entitled effects of self-regulated learning on Araling Panlipunan achievement of selected Southeast Asian Children, that students' low achievement in school is related to their poor study habits. In the same vein, Onwuegbuzie (2005) also conducted a series of studies to find out relationship between study habits and academic success. National Assessment of Educational Progress (NAEP) in 1994 conducted a study to find out the relationship between study habits and academic achievement. Findings of the study revealed a positive correlation between study habit and academic achievements of elementary and secondary school students.

The conceptions attitudes and expectations of the students regarding Araling Panlipunan and Araling Panlipunan teaching have been considered to be very significant factor underlying their school experience and achievement (Borasi, 2000). Based on the study on the roles of Attitudes, Perceptions and Family Backgrounds on Students Achievement in Araling Panlipunan; student engagement in Araling Panlipunan refer to students' in motivation to learn Araling Panlipunan, their confidence in their ability to succeed in Araling Panlipunan and their emotional feelings about Araling Panlipunan. Student engagement in Araling Panlipunan play a key role in acquisition of math skills and knowledge-students who are engaged in the learning process will tend to learn more and be more receptive to further learning. Student engagement also has an impact upon course selection, educational pathways and later career choices (Leder, 2003).

The learners' low performance is also attributed to their poor arithmetic ability. Saritas and Akdemir (2009) emphasized that arithmetic ability could also be another predictor of math achievement. Arithmetic ability includes: Skills such as manipulatory mathematical knowledge and concepts in ways that transform their meaning and implications. It allows students to interpret, analyze, synthesize, generalize and hypothesize the facts and ideas of Araling Panlipunan. Students with high arithmetic ability or mathematical reasoning can engage in tasks such as solving complex problems, discovering new meanings and understanding and arriving at logical conclusions.

The lack of instructional materials to be utilized is another factor. Ramalingam (2002) stressed that instructional media are the devices used as the supplementary material to enhance learners' interest, for effective teaching. They refer to all kinds of aids that are used by the teachers in the teaching and learning processes. Sophisticated modernized materials and computer techniques at large extent has replaced the traditional technique of talk and chalk. The purpose of instructional media in teaching is to stimulate, motivate and to activate the students in learning environment. Effective use of instructional media such as module plays a vital role in teaching and learning processes.

The effectiveness of instructional media is directly related to the excellent performance of the teachers in their instruction. Teachers should learn how to use the media to an extent possible and set appropriate mode of instructional strategies in the classroom especially in teaching Araling Panlipunan.

**Table 2.a**  
**Indices and Levels of Difficulty of the Araling Panlipunan Achievement Test**  
**Administered to the Grade 5 Learners**

| Item | Upper Group | Lower Group | U+L | Index of Difficulty | Level of Difficulty |
|------|-------------|-------------|-----|---------------------|---------------------|
| 1.   | 28          | 4           | 32  | .52                 | MD                  |
| 2.   | 15          | 5           | 20  | .32                 | MD                  |
| 3.   | 30          | 5           | 35  | .56                 | MD                  |
| 4.   | 12          | 6           | 18  | .29                 | MD                  |
| 5.   | 15          | 4           | 19  | .31                 | MD                  |
| 6.   | 18          | 6           | 24  | .39                 | MD                  |
| 7.   | 28          | 4           | 32  | .52                 | MD                  |
| 8.   | 30          | 5           | 35  | .56                 | MD                  |
| 9.   | 18          | 8           | 26  | .42                 | MD                  |
| 10.  | 15          | 5           | 20  | .32                 | MD                  |
| 11.  | 18          | 4           | 22  | .35                 | MD                  |
| 12.  | 25          | 4           | 29  | .48                 | MD                  |
| 13.  | 29          | 9           | 38  | .61                 | MD                  |
| 14.  | 24          | 4           | 28  | .45                 | MD                  |
| 15.  | 30          | 9           | 39  | .63                 | MD                  |
| 16.  | 16          | 4           | 20  | .32                 | MD                  |
| 17.  | 30          | 15          | 45  | .73                 | MD                  |
| 18.  | 28          | 18          | 46  | .74                 | MD                  |
| 19.  | 26          | 4           | 30  | .48                 | MD                  |
| 20.  | 8           | 4           | 12  | .19                 | VD                  |
| 21.  | 26          | 4           | 30  | .48                 | MD                  |
| 22.  | 23          | 8           | 31  | .50                 | MD                  |
| 23.  | 18          | 6           | 24  | .39                 | VD                  |
| 24.  | 19          | 1           | 20  | .32                 | MD                  |
| 25.  | 8           | 6           | 14  | .23                 | MD                  |
| 26.  | 16          | 7           | 23  | .37                 | MD                  |
| 27.  | 25          | 5           | 20  | .32                 | MD                  |
| 28.  | 30          | 8           | 38  | .61                 | MD                  |
| 29.  | 16          | 9           | 25  | .40                 | MD                  |
| 30.  | 4           | 3           | 7   | .11                 | VD                  |

**Legend:**

- .81 and up - Easy (E)
- .21-.80 - Moderately Difficult (MD)
- 0-.20 - Very Difficult (VD)

**Table 2.b**  
**Indices and Levels of Discrimination of the Araling Panlipunan Achievement Test**  
**Administered to the Grade 5 Learners**

| Item | Upper Group | Lower Group | U+L | Index of Difficulty | Level of Difficulty |
|------|-------------|-------------|-----|---------------------|---------------------|
| 1    | 28          | 4           | 24  | .39                 | RG                  |
| 2    | 15          | 5           | 10  | .16                 | P                   |
| 3    | 30          | 5           | 25  | .40                 | G                   |
| 4    | 12          | 6           | 6   | .10                 | P                   |
| 5    | 15          | 4           | 11  | .18                 | P                   |
| 6    | 18          | 6           | 12  | .19                 | P                   |
| 7    | 28          | 4           | 24  | .39                 | RG                  |
| 8    | 30          | 5           | 25  | .40                 | G                   |
| 9    | 18          | 8           | 10  | .16                 | P                   |
| 10   | 15          | 5           | 10  | .16                 | P                   |
| 11   | 18          | 4           | 14  | .23                 | MI                  |
| 12   | 25          | 4           | 21  | .34                 | RG                  |
| 13   | 29          | 9           | 20  | .32                 | RG                  |
| 14   | 24          | 4           | 20  | .32                 | RG                  |
| 15   | 30          | 9           | 21  | .34                 | RG                  |
| 16   | 16          | 4           | 12  | .19                 | P                   |
| 17   | 30          | 15          | 15  | .24                 | MI                  |



|    |    |    |    |     |           |
|----|----|----|----|-----|-----------|
| 18 | 28 | 18 | 10 | .16 | <b>P</b>  |
| 19 | 26 | 4  | 22 | .35 | <b>RG</b> |
| 20 | 8  | 4  | 4  | .06 | <b>P</b>  |
| 21 | 26 | 4  | 22 | .35 | <b>RG</b> |
| 22 | 23 | 8  | 15 | .24 | <b>MI</b> |
| 23 | 18 | 6  | 12 | .19 | <b>P</b>  |
| 24 | 19 | 1  | 18 | .29 | <b>MI</b> |
| 25 | 8  | 6  | 2  | .03 | <b>P</b>  |
| 26 | 16 | 7  | 9  | .14 | <b>P</b>  |
| 27 | 25 | 5  | 20 | .32 | <b>RG</b> |
| 28 | 30 | 8  | 22 | .35 | <b>RG</b> |
| 29 | 16 | 9  | 7  | .11 | <b>P</b>  |
| 30 | 4  | 3  | 1  | .02 | <b>P</b>  |

**Legend:**

| Item | P   | Level     | D   | Level     | Remarks           |
|------|-----|-----------|-----|-----------|-------------------|
| 1    | .52 | <b>MD</b> | .39 | <b>RG</b> | Included          |
| 2    | .32 | <b>MD</b> | .16 | <b>P</b>  | Discarded         |
| 3    | .56 | <b>MD</b> | .40 | <b>G</b>  | Included          |
| 4    | .29 | <b>MD</b> | .10 | <b>P</b>  | Discarded         |
| 5    | .31 | <b>MD</b> | .18 | <b>P</b>  | Discarded         |
| 6    | .39 | <b>MD</b> | .19 | <b>P</b>  | Discarded         |
| 7    | .52 | <b>MD</b> | .39 | <b>RG</b> | Included          |
| 8    | .56 | <b>MD</b> | .40 | <b>G</b>  | Included          |
| 9    | .42 | <b>MD</b> | .16 | <b>P</b>  | Discarded         |
| 10   | .32 | <b>MD</b> | .16 | <b>P</b>  | Discarded         |
| 11   | .35 | <b>MD</b> | .23 | <b>MI</b> | Included          |
| 12   | .48 | <b>MD</b> | .34 | <b>RG</b> | Included          |
| 13   | .61 | <b>MD</b> | .32 | <b>RG</b> | Included          |
| 14   | .45 | <b>MD</b> | .32 | <b>RG</b> | Included          |
| 15   | .63 | <b>MD</b> | .34 | <b>RG</b> | Included          |
| 16   | .32 | <b>MD</b> | .19 | <b>P</b>  | Discarded         |
| 17   | .73 | <b>MD</b> | .24 | <b>MI</b> | Improved/Included |
| 18   | .74 | <b>MD</b> | .16 | <b>P</b>  | Discarded         |
| 19   | .48 | <b>MD</b> | .35 | <b>RG</b> | Included          |
| 20   | .19 | <b>VD</b> | .06 | <b>P</b>  | Discarded         |
| 21   | .48 | <b>MD</b> | .35 | <b>RG</b> | Included          |
| 22   | .50 | <b>MD</b> | .24 | <b>MI</b> | Improved/Included |
| 23   | .39 | <b>VD</b> | .19 | <b>P</b>  | Discarded         |
| 24   | .32 | <b>MD</b> | .29 | <b>MI</b> | Improved/Included |
| 25   | .23 | <b>MD</b> | .03 | <b>P</b>  | Discarded         |
| 26   | .37 | <b>MD</b> | .14 | <b>P</b>  | Discarded         |
| 27   | .32 | <b>MD</b> | .32 | <b>RG</b> | Included          |
| 28   | .61 | <b>MD</b> | .35 | <b>RG</b> | Included          |
| 29   | .40 | <b>MD</b> | .11 | <b>P</b>  | Discarded         |
| 30   | .11 | <b>VD</b> | .02 | <b>P</b>  | Discarded         |

**Legend:**

- .40 and up - Good Item (G)
- .30-.39 - Reasonably Good (RG)
- .20-.29 - Marginal Item (MI)
- 0-.19 - Poor (P)



**Table 2.c**  
**Summary of the Indices and Levels of Difficulty**  
**and Discrimination of the Achievement Test In Araling Panlipunan**  
**Administered to the Grade 5 Learners**

**Legend:**

.81 and up - Easy (E)  
 .21-.80 - Moderately Difficult (MD)  
 0-.20 - Very Difficult (VD)  
 0-.19 - Poor (P)

**Legend:**

.40 and up - Good Item (G)  
 .30-.39 - Reasonably Good (RG)  
 .20-.29 - Marginal Item (MI)

Out of 30 items, only 53% were included for having a low level of difficulty and a high level of discrimination. A percentage of 47% of the items were discarded for having a high level of difficulty and a low level of discrimination.

The item which has the lowest level of difficulty is item number 17 which has 0.73 index and it is considered a "moderately difficult" item. The item which has the highest level of difficulty is number 30 which has an index of 0.11, "very difficult."

The item which has the lowest index of discrimination is item number 30 which has an index of 0.02. It is considered a poor test item. The items which have the highest index of difficulty are item numbers 3 and 8. They have an index of 0.40 which belongs to "reasonably good" items description.

**Table 2.d**  
**The Reliability of the Mother Tongue-based Achievement Test**  
**in Araling Panlipunan**

| X  | x | x <sup>2</sup> | Y  | y   | y <sup>2</sup> | z <sub>x</sub> | z <sub>y</sub> | z <sub>xy</sub> |
|----|---|----------------|----|-----|----------------|----------------|----------------|-----------------|
| 38 | 8 | 64             | 41 | 16  | 256            | 3.43           | 1.98           | 6.79            |
| 38 | 8 | 64             | 25 | 0   | 0              | 3.43           | 0              | 0               |
| 35 | 7 | 49             | 38 | 13  | 169            | 2.64           | 1.61           | 4.25            |
| 35 | 7 | 49             | 26 | 1   | 1              | 2.64           | 0.12           | 0.32            |
| 35 | 7 | 49             | 25 | 0   | 0              | 2.64           | 0              | 0               |
| 35 | 7 | 49             | 24 | -1  | 1              | 2.64           | -0.12          | -0.32           |
| 35 | 7 | 49             | 8  | -13 | 169            | 2.64           | -2.10          | -5.54           |
| 34 | 7 | 49             | 30 | 5   | 25             | 2.64           | 0.62           | 1.47            |
| 34 | 6 | 36             | 38 | 13  | 169            | 2.37           | 1.61           | 3.82            |
| 34 | 6 | 36             | 27 | 2   | 4              | 2.37           | 0.25           | 0.59            |
| 34 | 6 | 36             | 35 | 10  | 100            | 2.37           | 1.24           | 2.94            |
| 34 | 6 | 36             | 8  | -13 | 169            | 2.37           | -2.10          | -4.98           |
| 34 | 6 | 36             | 28 | 3   | 9              | 2.37           | 0.37           | 0.68            |
| 32 | 5 | 25             | 31 | 6   | 36             | 1.85           | 0.74           | 1.37            |
| 32 | 5 | 25             | 32 | 7   | 49             | 1.85           | 0.87           | 1.61            |
| 32 | 5 | 25             | 43 | 16  | 256            | 1.85           | 2.23           | 4.13            |
| 32 | 5 | 25             | 28 | 3   | 9              | 1.85           | 0.37           | 0.68            |
| 32 | 5 | 25             | 20 | -4  | 16             | 1.85           | -0.62          | -1.15           |
| 32 | 5 | 25             | 18 | -5  | 25             | 1.85           | -0.87          | -1.61           |
| 32 | 5 | 25             | 17 | -6  | 36             | 1.85           | -0.99          | -1.31           |
| 30 | 4 | 16             | 15 | -8  | 64             | 1.32           | -1.24          | -1.64           |
| 30 | 4 | 16             | 25 | 0   | 0              | 1.32           | 0              | 0               |
| 30 | 4 | 16             | 20 | -4  | 16             | 1.32           | -0.62          | -0.81           |
| 30 | 4 | 16             | 21 | -3  | 9              | 1.32           | -0.50          | -0.66           |
| 30 | 4 | 16             | 20 | -4  | 16             | 1.32           | -0.62          | -0.65           |
| 29 | 3 | 9              | 33 | 8   | 64             | 1.05           | 0.99           | 1.04            |
| 29 | 3 | 9              | 34 | 9   | 81             | 1.05           | 1.11           | 1.17            |
| 29 | 3 | 9              | 20 | -4  | 16             | 1.05           | -0.62          | -0.65           |
| 29 | 3 | 9              | 24 | -1  | 1              | 1.05           | -0.12          | -0.06           |
| 27 | 2 | 4              | 21 | -3  | 9              | 0.53           | -0.50          | -0.27           |
| 27 | 2 | 4              | 33 | 8   | 64             | 0.53           | 0.99           | 0.52            |
| 27 | 2 | 4              | 32 | 7   | 49             | 0.53           | 0.87           | 0.46            |
| 27 | 2 | 4              | 30 | 5   | 25             | 0.53           | 0.62           | 0.33            |
| 27 | 2 | 4              | 28 | 3   | 9              | 0.53           | 0.37           | 0.20            |
| 27 | 2 | 4              | 35 | 10  | 100            | 0.53           | 1.24           | 0.66            |
| 27 | 2 | 4              | 38 | 13  | 169            | 0.53           | 0.37           | 0.20            |
| 27 | 2 | 4              | 36 | 11  | 121            | 0.53           | 1.36           | 0.72            |
| 27 | 2 | 4              | 27 | 2   | 4              | 0.53           | 0.25           | 0.13            |
| 27 | 2 | 4              | 39 | 14  | 196            | 0.53           | 1.73           | 0.92            |
| 27 | 2 | 4              | 33 | 8   | 64             | 0.53           | 0.99           | 0.26            |
| 26 | 1 | 1              | 38 | 13  | 169            | 0.26           | 0.37           | 0.10            |
| X  | x | x <sup>2</sup> | Y  | y   | y <sup>2</sup> | z <sub>x</sub> | z <sub>y</sub> | z <sub>xy</sub> |
| 26 | 1 | 1              | 36 | 11  | 121            | 0.26           | 1.36           | 0.35            |

|          |          |                      |          |          |                      |                      |                      |                       |
|----------|----------|----------------------|----------|----------|----------------------|----------------------|----------------------|-----------------------|
| 26       | 1        | 1                    | 37       | 12       | 144                  | 0.26                 | 1.49                 | 0.39                  |
| 26       | 1        | 1                    | 38       | 13       | 169                  | 0.26                 | 0.37                 | 0.10                  |
| 26       | 1        | 1                    | 33       | 8        | 64                   | 0.26                 | 0.99                 | 0                     |
| 25       | 0        | 0                    | 30       | 5        | 25                   | 0                    | 0.62                 | 0                     |
| 25       | 0        | 0                    | 33       | 8        | 64                   | 0                    | 0.99                 | 0                     |
| 25       | 0        | 0                    | 35       | 10       | 100                  | 0                    | 1.24                 | 0                     |
| 25       | 0        | 0                    | 31       | 6        | 36                   | 0                    | 0.74                 | 0                     |
| 25       | 0        | 0                    | 21       | -3       | 9                    | 0                    | -0.50                | 0                     |
| 25       | 0        | 0                    | 18       | -5       | 25                   | 0                    | -0.87                | 0                     |
| 25       | 0        | 0                    | 15       | -8       | 64                   | 0                    | -1.24                | 0                     |
| 25       | 0        | 0                    | 15       | -8       | 64                   | 0                    | -1.24                | 0                     |
| 25       | 0        | 0                    | 10       | -12      | 144                  | 0                    | -1.86                | 0                     |
| 25       | 0        | 0                    | 10       | -12      | 144                  | 0                    | -1.86                | 0                     |
| 25       | 0        | 0                    | 18       | -5       | 25                   | 0                    | -0.87                | 0                     |
| 22       | -1       | 1                    | 38       | 13       | 169                  | -0.79                | 0.37                 | -0.29                 |
| 22       | -1       | 1                    | 18       | -5       | 25                   | -0.79                | -0.87                | 0.69                  |
| 22       | -1       | 1                    | 20       | -4       | 16                   | -0.79                | -0.62                | 0.49                  |
| 22       | -1       | 1                    | 14       | -9       | 81                   | -0.79                | -1.36                | 1.07                  |
| 22       | -1       | 1                    | 13       | -10      | 100                  | -0.79                | -1.49                | 1.18                  |
| 22       | -1       | 1                    | 15       | -8       | 64                   | -0.79                | -1.24                | 0.98                  |
| 22       | -1       | 1                    | 20       | -4       | 16                   | -0.79                | -0.62                | 0.49                  |
| 22       | -1       | 1                    | 15       | -8       | 64                   | -0.79                | -1.24                | 0.98                  |
| 22       | -1       | 1                    | 33       | 8        | 64                   | -0.79                | 0.99                 | -0.78                 |
| 22       | -1       | 1                    | 35       | 10       | 100                  | -0.79                | 1.24                 | -0.98                 |
| 22       | -1       | 1                    | 36       | 11       | 121                  | -0.79                | 1.36                 | -1.02                 |
| 22       | -1       | 1                    | 32       | 7        | 49                   | -0.79                | 0.87                 | -0.65                 |
| 20       | -2       | 4                    | 16       | -7       | 49                   | -1.32                | -1.11                | 1.47                  |
| 20       | -2       | 4                    | 28       | 3        | 9                    | -1.32                | 0.37                 | -0.49                 |
| 20       | -2       | 4                    | 31       | 6        | 36                   | -1.32                | 0.74                 | -0.98                 |
| 20       | -2       | 4                    | 18       | -5       | 25                   | -1.32                | -0.87                | 1.15                  |
| 20       | -2       | 4                    | 15       | -8       | 64                   | -1.32                | -1.24                | 1.64                  |
| 20       | -2       | 4                    | 15       | -8       | 64                   | -1.32                | -1.24                | 1.64                  |
| 20       | -2       | 4                    | 25       | 0        | 0                    | -1.32                | 0                    | 0                     |
| 18       | -3       | 9                    | 28       | 3        | 9                    | -1.85                | 0.37                 | -0.68                 |
| 18       | -3       | 9                    | 29       | 4        | 16                   | -1.85                | 0.50                 | -0.93                 |
| 18       | -3       | 9                    | 26       | 1        | 1                    | -1.85                | 0.12                 | -0.22                 |
| 18       | -3       | 9                    | 25       | 0        | 0                    | -1.85                | 0                    | 0                     |
| 18       | -3       | 9                    | 10       | -12      | 144                  | -1.85                | -1.86                | 3.44                  |
| 18       | -3       | 9                    | 23       | -2       | 4                    | -1.85                | -0.25                | 0.46                  |
| 15       | -4       | 16                   | 10       | -12      | 144                  | -2.64                | -1.86                | 4.91                  |
| 15       | -4       | 16                   | 20       | -4       | 16                   | -2.64                | -0.62                | 1.64                  |
| 15       | -4       | 16                   | 23       | -2       | 4                    | -2.64                | -0.25                | 0.66                  |
| 15       | -4       | 16                   | 28       | 3        | 9                    | -2.64                | 0.37                 | 0.98                  |
| <b>X</b> | <b>x</b> | <b>x<sup>2</sup></b> | <b>Y</b> | <b>y</b> | <b>y<sup>2</sup></b> | <b>z<sub>x</sub></b> | <b>z<sub>y</sub></b> | <b>z<sub>xy</sub></b> |
| 15       | -4       | 16                   | 31       | 6        | 36                   | -2.64                | 0.74                 | 1.95                  |
| 13       | -5       | 25                   | 10       | -12      | 144                  | -3.17                | -1.86                | 5.90                  |
| 13       | -5       | 25                   | 8        | -13      | 169                  | -3.17                | -2.10                | 6.66                  |
| 13       | -5       | 25                   | 28       | 3        | 9                    | -3.17                | 0.37                 | -1.17                 |
| 13       | -5       | 25                   | 29       | 4        | 16                   | -3.17                | 0.50                 | -1.59                 |
| 13       | -5       | 25                   | 25       | 0        | 0                    | -3.17                | 0                    | 0                     |
| 10       | -6       | 36                   | 18       | -5       | 25                   | -3.96                | -0.87                | 3.45                  |
| 10       | -6       | 36                   | 20       | -4       | 16                   | -3.96                | -0.62                | 2.46                  |
| 8        | -7       | 49                   | 15       | 8        | 64                   | -4.49                | -1.24                | 5.57                  |
| 8        | -7       | 49                   | 12       | -11      | 121                  | -4.49                | -1.61                | 5.52                  |

$$r = \frac{s_{xy}}{\sqrt{s_x^2 y^2}}$$

$$= \frac{58.72}{95}$$

$$r = +0.62$$

The interpretation of the coefficient of stability based on the computed Pearson's r is given below:

- *0.9 and greater:* Excellent reliability
- *Between 0.9 and 0.8:* Good reliability
- *Between 0.8 and 0.7:* Acceptable reliability
- *Between 0.7 and 0.6:* Questionable reliability

- *Between 0.6 and 0.5*: Poor reliability
- *Less than 0.5*: Unacceptable reliability

Since the computed Pearson's  $r$  results to +0.62, we can say that there is a questionable reliability of the Achievement Test. It indicated that each respondent's scores are not perfectly correlated. A low level of reliability depends on the following factors: (1) the time interval is long, such factors such as forgetting, unlearning, among others; (2) environmental conditions such as temperature, lightning noise, and other factors may affect the correlation coefficient of the test.

## SUMMARY

This study assessed the performance level of the Grade 5 learners in Magalong Elementary School on the Araling Panlipunan Achievement Test. It also determined the validity and reliability of the achievement test in terms of index of difficulty and index of discrimination. The results of which were utilized as a basis for proposing an achievement test in Araling Panlipunan for Grade 5.

The descriptive method of research was used in the study. The researcher observed the steps in the construction of an appropriate, valid, and reliable test, taking into consideration the needs of Grade 5 learners in Araling Panlipunan. Subsequently, the initial test items were constructed and these were subjected to face validation for improvement, to a try-out for an item analysis to determine indices and levels of difficulty and discrimination, to further improvement based on the results, and to a reliability test. Ninety-five (95) learners' test results in the Araling Panlipunan Achievement Test were analyzed. The results of which were used as bases to develop and propose an achievement test for Grade 5 learners.

The tools for data analysis used were the mean, mean percentage score, index of difficulty, index of discrimination, and Pearson  $r$ .

## FINDINGS

**1.0. Level of Performance of Grade 5 Learners in the Araling Panlipunan Achievement Test** The performance level of the Grade 5 learners in the Achievement Tests in Araling Panlipunan was generally low as indicated by the computed mean of 24.48, which when converted to mean percentage scores, indicated their performance level was only 48.96 percent. This is too low when compared to the standard mean percentage score set by the Department of Education, which is 75%.

**2.0. Validity and reliability of the Araling Panlipunan Achievement Test**  
**2.1. Index and level of difficulty** Out of 30 items, only three (3) had an index of "very difficult." Item number 20 had an index of difficulty of 0.19, item number 23 had an index of difficulty of 0.39, and item number 30 had an index of difficulty of 0.11. Twenty-seven (27) of the items had a "moderate" index of difficulty. The highest index of difficulty was item number 18, which had an index of 0.74.

**2.2. Index and level of discrimination** Out of 30 items, two (2) of them are considered "good items." The items which had the highest index of discrimination are items number 3 and 8. Eleven (11) of the total items are considered "reasonably good." Four (4) are considered "marginal" items. Fourteen (14) of the items are considered "poor" items. The item with the lowest index of discrimination is item number 30 with a 0.02 index.

**2.3. Summary of the Indices and Levels of Difficulty and Discrimination of the Achievement Test in Araling Panlipunan** Out of 30 items, only 53% were included for having a low level of difficulty and a high level of discrimination. A percentage of 47% of the items were discarded for having a high level of difficulty and a low level of discrimination.

**2.4. The Reliability of the Achievement Test Utilized by the Grade 5 Teachers in Teaching Araling Panlipunan** The computed Pearson's  $r$  is +0.64. Based on the given interpretation guidelines, this means there is a questionable reliability of the Achievement Test. It indicated that the achievement test utilized by the Grade 5 teachers in Araling Panlipunan was not a good instrument to be used by their learners.

**3.0. The Proposed Achievement Test in Araling Panlipunan for Grade 5 Learners** The proposed Araling Panlipunan achievement test was based on the performance level of the Grade 5 learners and from the results of the validity and reliability of the achievement test utilized by the learners.

**4.0. The Validity and Reliability of the Proposed Achievement Test**

**2.1. Index and level of difficulty** Out of 30 items, only one (1) had an index of "very difficult." Item number 20 had an index of difficulty of 0.19. Twenty-nine (29) of the items had a "moderate" index of difficulty. The highest index of difficulty under this category is item number 18, which had an index of 0.74.

**2.2. Index and level of discrimination** Out of 30 items, two (2) of them are considered "good items." The items which had the highest index of discrimination are items number 3 and 8. Eleven (11) of the total items are considered "reasonably good." Nine (9) of the total number are considered "marginal" items. Eight (8) of the items are considered "poor" items. The item with the lowest index of discrimination is item number 25 with a 0.03 index.

**2.3. Summary of the Indices and Levels of Difficulty and Discrimination of the Achievement Test in Araling Panlipunan** Out of 30 items, only 77% were included for having a low level of difficulty and a high level of discrimination. A percentage of 23% of the items were discarded for having a high level of difficulty and a low level of discrimination.

2.4. The Reliability of the Achievement Test Utilized by the Grade 5 Teachers in Teaching Araling Panlipunan The computed Pearson's  $r$  is +1.24. Based on the given interpretation guidelines, this means there is excellent reliability of the Achievement Test. It indicated that the proposed achievement test is a good instrument to be used by the Grade 5 learners.

## CONCLUSIONS

Based on the findings, the following conclusions are drawn:

1. The Grade 5 learners in Magalong Elementary School had a low performance in the Achievement Test.
2. The Achievement Test in Araling Panlipunan, based on the summary of the indices and levels of difficulty and discrimination, was not valid and not reliable.
3. The proposed Achievement Test in Araling Panlipunan possessed a high level of reliability based on the computed Pearson  $r$ .

## RECOMMENDATIONS

Based on the findings and conclusions drawn, the following recommendations are offered:

1. The school administrators should conduct school-level in-service training to enrich the Araling Panlipunan curriculum by preparing suitable materials that address the weaknesses of the learners noted.
2. The school administrators should send Araling Panlipunan teachers to seminars and ensure that the knowledge acquired is implemented and continually monitored and evaluated to determine its effectiveness.
3. The proposed remedial instruction program should be implemented in the school to address the weaknesses of Grade 5 learners in the different Araling Panlipunan areas/skills.
4. Other researchers in Araling Panlipunan similar to this study should be conducted in other schools, districts, or divisions to validate the findings of this study.
5. Considering that the proposed achievement test was specially designed to address the needs of the Grade 5 learners in Magalong Elementary School and that the test was subjected to try-outs with the target learners and subsequently improved, administrators can initiate the application of the test for use by learners in other schools.
6. Other researchers may use the proposed test as a guide in conducting similar studies to produce effective achievement tests in Araling Panlipunan. Research may be needed to develop guidelines and principles on how to design effective tests.

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