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Teachers' Level of Implementation on Digitalized Instructional Materials in Teaching Araling Panlipunan towards the Learners' Academic Achievement after The Pandemic

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ABSTRACT

Digitalized instructional materials have been a popular teaching tool among teachers during and after the pandemic, which supported the continuity of learning through teachers have gone through a series of trainings and workshops to capacitate them and to equip them further in addressing their recent needs as digitalization of the teaching materials has continued to expand as it continued to link the teachers and learners. This study aimed to investigate the teachers' level of implementation of digitalized instructional materials in teaching Araling Panlipunan towards the learner's academic achievement after the pandemic in District I, Division of Malaybalay City, for the school year 2022-2023.Based on the data gathered, the significant findings are the following: There was a very high level of teachers' level of implementation of digitalized instructional materials in teaching Araling Panlipunan in terms of accessibility, active engagement, and advocacy of inclusion in District 1, Division of Malaybalay City for the school year 2022-2023. There was a very satisfactory grade among the learners in their Araling Panlipunan subject. There was a significant relationship between the teachers' level of implementation of digitalized instructional materials in teaching Araling Panlipunan in terms of accessibility, active engagement, and advocacy of inclusion and the learners' academic achievement in Araling Panlipunan in District 1 of Malaybalay City Division. Based on the findings, the following recommendations are hereby offered:

Teachers may sustain their high level of the implementation of the digitalized instructional materials in terms of accessibility, active engagement, and advocacy for inclusion by providing appropriate digitalized instructional materials to learners that are accessible to them, ensuring that these digitalized learning materials promote active learning among learners and guaranteeing that these learning materials are promoting the inclusion of diverse cultural background in District 1, Division of Malaybalay City for the school year 2022-2023.

Keywords: *Level, Implementation, Digitalized Instruction, Learners' Academic*

Introduction

The use of digitalized instructional materials has gained significant traction among educators, particularly during the COVID-19 pandemic, where face-to-face instruction was disrupted. These materials have enabled continuous learning while mitigating health risks. In response, educators have undergone training to improve their skills and adapt to this new teaching approach. As digitalization in education expands, it has played a pivotal role in maintaining the connection between teachers and students, ensuring the flow of learning. Research by Rice et al. (2021) suggests that digital materials positively influence student performance, providing opportunities for independent learning and personalized support when teachers are unavailable.

The surge in demand for digital instructional materials can be attributed to their positive impact on student achievement and teacher performance. These materials include multimedia resources such as videos, animations, and educational games, which offer more engaging and accessible content. Digital resources also relieve teachers of the burden of physical materials, allowing more time for enhancing student engagement. Even as schools return to in-person learning, digital materials remain valuable for maintaining up-to-date resources and easing the teacher's workload (Martin et al., 2020).

However, challenges exist in the implementation of digital materials, including limited access to technology and insufficient training. Some educators struggle to integrate digital tools due to a lack of support and expertise (Klein, 2019). Despite these challenges, many teachers continue to rely on online resources, with platforms like Google and Pinterest widely used for instructional planning (Rice, 2022). This study seeks to investigate the implementation of digitalized instructional materials in Araling Panlipunan and their impact on students' academic achievement, aiming to provide insights for teachers on effectively utilizing these materials to enhance learning outcomes.

Conceptual Framework

This study is grounded in the principles of DepEd Order No. 78, S. 2010, "Guidelines on the Implementation of the Department of Education Computerization Program (DCP)," which emphasizes equal access to education and highlights the role of technology in transforming the educational landscape. The DCP initiative aims to equip public schools with the necessary technology to improve the teaching and learning process while addressing the demands of the 21st century. By enhancing the ICT literacy of students, teachers, and school heads, the program supports a more effective and inclusive learning environment.

The conceptual framework of this study examines the relationship between two key variables: the extent to which teachers implement digitalized instructional materials (focusing on accessibility, active engagement, and inclusivity) and the academic achievement of students in Araling Panlipunan. In the rapidly advancing technological era, educational advancements offer significant potential to improve teaching and learning quality, particularly for students with varying needs. The use of high-quality digital materials, tools, and resources provides students with up-to-date, relevant methods for acquiring knowledge and skills.

Technology-rich learning environments, enhanced by digital materials, offer engaging and customized instructional practices that appeal to both students and teachers. This digital transformation in education is seen as essential for fostering student engagement and active participation in the learning process. The preparedness of educators plays a critical role in developing digitally proficient learners. This preparedness includes assessing the availability of educational resources, ensuring easy access, fostering active interaction with materials, and promoting inclusive learning practices. Thus, the framework suggests that the effective implementation of digital materials by teachers can positively influence students' academic performance, particularly in Araling Panlipunan.

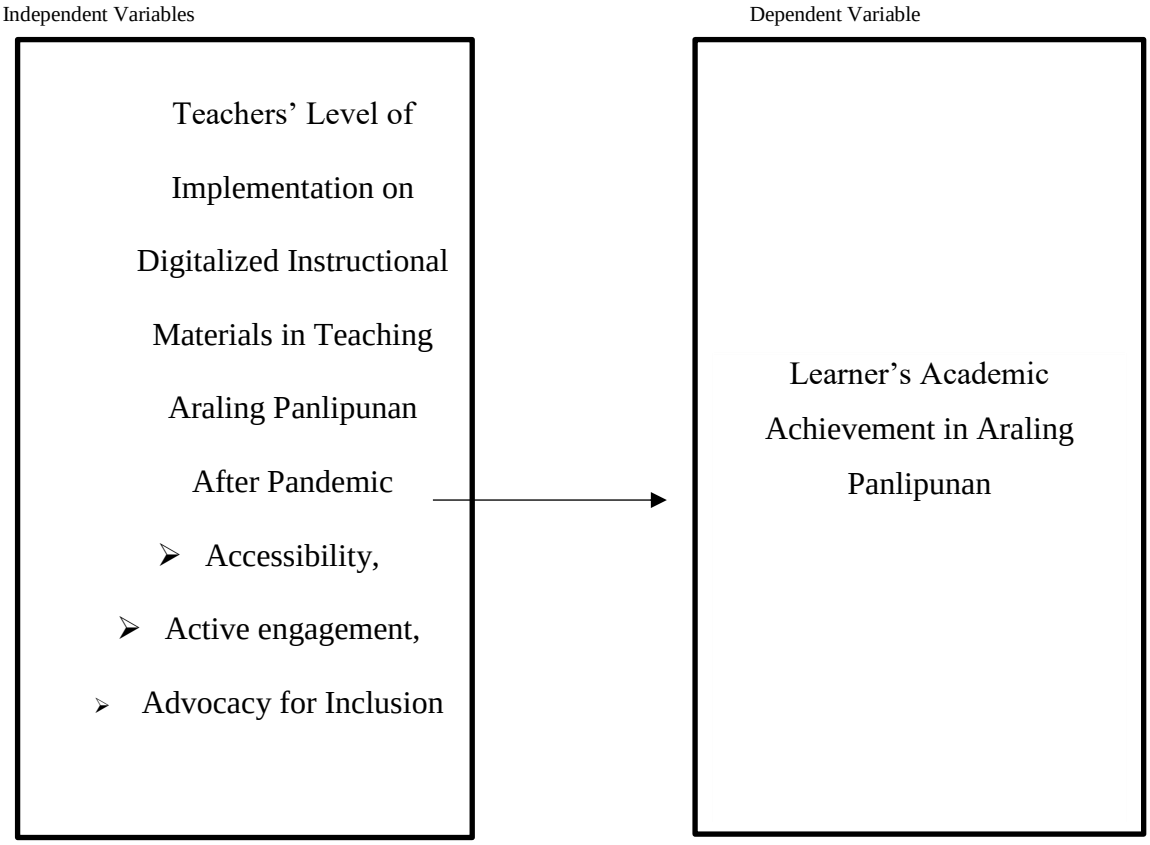

Figure1. Schematic Diagram showing the Independent and Dependent Variables under Study

The paper hypothesized that :There is no significant relationship between the teachers' level of implementation of digitalized instructional materials in teaching Araling Panlipunan and the learner's academic achievement after the pandemic.

(Figure 1)

Scope

The present study investigates the extent to which teachers incorporate digitalized instructional materials in their Araling Panlipunan lessons and how this implementation impacts the academic achievement of grade 1 to grade 6 learners in Araling Panlipunan within Malaybalay City District 1, Division of Malaybalay City during the school year 2022-2023.

The educational landscape of Malaybalay City District 1 includes a total of 5,690 learners, ranging from grades one through six. This group is supported by a dedicated team of 103 teachers, who play a crucial role in facilitating the learning process. The participants in this study consist of 103 teachers responsible for teaching Araling Panlipunan, along with their respective pupils.

In this study, the level of implementation of digitalized instructional materials in teaching Araling Panlipunan after the pandemic is assessed by the teachers. The Checklist on Evaluating Digital Instructional Materials for K-12 Online and Blended Learning, developed by Rice et al. in 2021, is used for this purpose. Additionally, the average grade of Grade 1 to Grade 6 learners in Araling Panlipunan during the Third Quarter of the School Year 2022-2023 is considered as the independent variable in this research.

The present study seeks to provide a comprehensive dataset that supports the educational goals of institutions, especially in the post-pandemic era as students return to physical classrooms. For learners, understanding how teachers incorporate digital instructional materials in teaching Araling Panlipunan may improve their academic performance, fostering increased motivation and effort. This exposure to varied teaching approaches can cultivate enthusiasm, enhance skills, and promote a deeper aptitude for learning.

This study also aims to raise awareness among headteachers about the implementation of digitalized instructional materials tailored to meet the diverse needs of students. Such insights could lead to the development of new strategies to improve teaching quality in Araling Panlipunan.

The findings of this research may encourage school administrators to offer greater support to teachers, helping them improve their proficiency in using digital resources through more supervision and professional development initiatives. Additionally, the study may inspire educators, including the researcher, to enhance their teaching practices and equip students with the skills and knowledge that surpass their own expectations, ultimately benefiting both students and educators.

The following terms are operationally defined to provide a consistent understanding of the concepts used in this study:

Academic Achievement refers to the knowledge gained by students, which is assessed by teachers through marks and educational goals. These goals are set by both teachers and students and are aimed at being accomplished over a specific period, reflecting the student's learning progress and performance.

Accessibility denotes the ease with which digital instructional materials can be accessed by both teachers and students. It ensures that users can easily open, view, and interact with the materials. For effective use, the materials must include specific design features and supports that enable seamless access for all learners.

Active Engagement refers to the process by which digital instructional materials encourage students to invest effort and energy into learning the presented concepts. It involves multiple dimensions of engagement, as students actively participate in the learning process, which is essential for deep learning (Fredricks et al., 2004; Hughes et al., 2008).

Advocacy for Inclusion involves the use of digital instructional materials to promote the inclusion of diverse groups of people, ensuring that learning content is presented with contextual sensitivity, compassion, and respect for different backgrounds and perspectives.

Digitalized Instructional Materials are multimedia-based resources that utilize electronic mechanisms to enhance learning through both audio and visual effects. These materials are designed to engage students actively, using animations and interactive elements to support the learning process (Cheon & Grant, 2008; Mayer, 2019).

Review of Related Literature

In the context of the evolving educational landscape post-pandemic, this section delves into the key factors surrounding the implementation of digitalized instructional materials, particularly in teaching Araling Panlipunan, and their influence on learners' academic achievement. With the increasing reliance on technology in the classroom, it is essential to examine how digital resources—such as lesson plans, videos, and interactive tools—have transformed traditional teaching methods. These materials not only enhance accessibility and engagement but also support inclusion and foster a more dynamic learning experience. This review explores the impact of digitalized instructional materials on academic success, highlighting the essential components for their effective integration, including accessibility, active engagement, advocacy for inclusion, and their direct contribution to students' academic outcomes. By reflecting on these aspects, the researcher aims to understand the role of digital tools in shaping educational practices and their potential in improving academic achievement in the post-pandemic era.

On Digitalized Instructional Material

The adoption of digitalized instructional materials plays a pivotal role in transforming the classroom environment by enriching the learning experience. Visual aids, such as images and demonstrations, support students' understanding, especially when verbal explanations are insufficient. Digitalization refers to the process of converting traditional instructional methods into digital formats, where online tools and devices are crucial. These digital resources cater to diverse student needs and provide opportunities for inclusive education, making them accessible to a broader range of learners.

Digital materials, including lesson plans, instructional videos, and assessments, enhance the learning environment and are particularly advantageous for students with disabilities. These resources are flexible and customizable, adhering to universal design principles, which make them more inclusive. Compared to traditional textbooks, digital materials are not only more cost-effective but also easier to update. In subjects like Araling Panlipunan, the

use of digitalized resources enhances lesson delivery, provides convenience, and ensures accurate information dissemination. These resources are accessible at any time and from anywhere, benefiting both students and teachers. For effective integration, it is essential to prioritize four components: accessibility, active engagement, advocacy for inclusion, and accountability, which ensure the effective use of digital tools in the learning process.

On Accessibility

Accessibility in digital instructional materials refers to the ease with which students can interact with these materials while adhering to educational and legal standards. It emphasizes creating resources that are usable by all students, including those with disabilities. Rose (2018) highlights that students' learning can be hindered when they cannot effectively engage with digital materials. Ensuring accessibility involves addressing challenges such as providing alternative text for images, ensuring compatibility with screen readers, and including captions for videos (Rose, 2018).

A significant challenge is the complex steps required to access certain digital resources, which can reduce their accessibility. For instance, a student may need to log into a learning management system, locate a document, print it, solve problems, scan it, and submit it. These steps can be particularly challenging when materials are linguistically complex or require additional effort (Rice & Deshler, 2018). To enhance accessibility, educators are encouraged to utilize text-to-speech software, provide customizable display options, and include alternative text for images. Additionally, assistive technologies like larger monitors and specialized keyboards can aid students with disabilities in accessing digital content effectively.

On Active Engagement

Active engagement with digital instructional materials involves behavioral, cognitive, and emotional participation, which directly influences learning outcomes. Engagement is crucial for academic success, as it dictates how students interact with and comprehend content (Fredricks et al., 2014; Hughes et al., 2018). Research suggests that multimedia tools, such as interactive videos, games, and simulations, can increase student engagement by allowing them to access resources at their own pace, particularly in remote or blended learning settings (Cheon & Grant, 2018; Boetcher & Conrad, 2016).

Active engagement is promoted when students actively participate in tasks, such as answering questions, completing assignments, and engaging in online discussions (Chapman, 2003; Lawson & Lawson, 2013). However, too many choices can overwhelm students and diminish engagement (Shapiro, 2008). Additionally, content that generates negative emotional responses, like distressing topics, may reduce engagement (Reeve, 2012; Nabi, 1999). Hence, it is essential to design digital materials that foster cognitive, behavioral, and emotional engagement, incorporating features such as feedback, leaderboards, and positive reinforcement (Chiu & Churchill, 2015; Reeves & Reed, 2009).

On Advocacy for Inclusion

Inclusion in digital instructional materials involves ensuring that content is representative of diverse individuals in an accurate and respectful manner. It is essential to promote understanding of diverse perspectives, especially for historically marginalized groups whose voices have often been absent or misrepresented in traditional curricula (Bishop, 2012). Digital materials can shape the "hidden curriculum," which reflects implicit values, such as the prioritization of certain social characteristics over others (Alsubaie, 2015).

To foster inclusion, educators must scrutinize digital materials for biased content, such as gender stereotypes or racial underrepresentation (Archambault et al., 2021). Teachers must actively review and select materials that reflect diverse perspectives and encourage students to engage with these viewpoints critically (Gallagher et al., 2019). The goal is to create an educational environment that promotes fairness and allows students to challenge social injustices through informed discussions.

On Academic Achievement with Digitalized Instructional Materials

The integration of digitalized instructional materials has a profound impact on student academic achievement. These resources foster active participation, enhancing engagement through multimedia elements like graphics, video, and audio, which contribute to a more dynamic learning experience. The use of digitalized tools encourages students to engage in independent research and problem-solving, leading to improved comprehension and retention (Robin, 2009).

Studies have consistently shown that digitalized instructional materials positively affect academic outcomes. By increasing student engagement and promoting active learning, these materials help develop critical thinking, creativity, and motivation (Dogan & Robin, 2008). Research by Aktas et al. (2016) and others demonstrates that digital tools improve test scores and academic performance, as students interact with content more deeply and retain information more effectively (Burmark, 2004; Wang & Zhan, 2010).

Moreover, digital tools not only improve academic achievement but also develop essential 21st-century skills, such as digital literacy, communication, and collaboration. By catering to various learning styles, digital materials offer students multiple avenues for engagement, further supporting academic success (Yüksel, 2011; Sadik, 2008). Therefore, the integration of digitalized instructional materials enhances student engagement, motivates learners, and promotes higher academic performance, ultimately enriching the educational experience.

Methodology

This chapter discusses the data collection procedure employed in the study. It covers a variety of topics, including the research design, location, respondents, sampling method, data gathering procedure, research instrument, instrument validation, scoring procedure, and data handling processes.

The research utilized a descriptive correlational research design, which aimed to explore the relationships between variables, and a quantitative approach, focusing on the collection and analysis of numerical data. The data gathered from the surveys were analyzed statistically to describe the responses. The survey served as the primary instrument for data collection. The study sought to investigate the potential correlation between the extent to which teachers incorporated digitalized instructional materials in their Araling Panlipunan lessons and the academic performance of learners, particularly after the pandemic. The data collection process involved purposive sampling, where participants were selected based on specific criteria relevant to the research objectives.

The study was conducted in Malaybalay City District 1, located within the administrative boundaries of Malaybalay City, during the academic year 2022-2023. The schools selected for the study were Kalasungay Central School, Patpat Elementary School, Dalwangan Elementary School, New Ilocos Elementary School, and Capitan Angel Integrated School. These schools were chosen based on their proximity to the researcher, which ensured ease of access for data collection. Kalasungay Central School is particularly noteworthy, as it is the only institution offering special education services within the group. These schools serve students from kindergarten through grade 6 and are known for their commitment to both academic and extracurricular excellence. Furthermore, all the schools in the study have been validated as Level III implementers of the school-based management system, except for those at Level II. These schools have earned recognition for their successful implementation of programs like Brigada Eskwela and the SAFE-CI initiative. The schools also collaborate with local stakeholders, including the local government units, the Parent-Teacher Association, and the School Governing Council, to ensure the successful implementation of various projects.

The study's participants included 103 teachers responsible for teaching Araling Panlipunan in grades 1 to 6 across the selected schools in Malaybalay City District 1 during the 2022-2023 academic year. These teachers had diverse teaching experiences and academic backgrounds. The study specifically focused on teachers who had integrated digitalized instructional materials into their Araling Panlipunan lessons. The intention was to understand how these digital tools were implemented and how they influenced the academic performance of students after the pandemic.

The teachers were selected using a purposive random sampling method. The sampling criteria included the teachers' roles as instructors of Araling Panlipunan and their use of digital instructional materials in their teaching. This purposive sampling method aimed to focus on elementary school teachers who had experience incorporating digital tools in their Araling Panlipunan lessons, specifically after the pandemic. The distribution of the respondents across the different schools. In Kalasungay Central School, 32 teachers participated, while Patpat Elementary School contributed 21 teachers. Dalwangan Elementary School had 25 teachers, New Ilocos Elementary School had 11, and Capitan Angel Integrated School contributed 7 teachers, summing up to a total of 103 teacher-respondents.

The research instrument was developed based on the framework proposed by Rice et al. (2021) in their study on evaluating digital instructional materials for K–12 online and blended learning. The questionnaire aimed to assess the extent to which teachers used digital instructional materials in their Araling Panlipunan lessons and to evaluate the academic performance of students during the Third Quarter of the academic year. The instrument was adapted to align with the Araling Panlipunan curriculum and underwent rigorous validation, yielding a reliability measure of Cronbach's Alpha = .972. The questionnaire consisted of several sections: an introductory section for the respondent's name, a survey section assessing the level of digital material implementation, and a final section on the learners' academic performance. The survey focused on three key dimensions: Accessibility, Active Engagement, and Advocacy for Inclusion. Teachers rated the extent of their digital material usage on a Five-Point Likert Scale ranging from "Not Implemented at All" to "Very Highly Implemented."

The scoring for the implementation of digitalized instructional materials was based on the Five-Point Likert Scale, with the following qualitative descriptions: 5 (Very Highly Implemented): The teacher consistently used the material (9-10 times out of 10), 4 (Highly Implemented): The material was used frequently (7-8 times out of 10), 3 (Implemented): The material was used occasionally (4-6 times out of 10), 2 (Less Implemented): The material was used rarely (1-3 times out of 10), andn1 (Not Implemented at All): The material was never used. The academic achievement of students was assessed using a grading scale with the following qualitative descriptions: Outstanding (90-100%), Very Satisfactory (85-89%), Satisfactory (80-84%), Fairly Satisfactory (75-79%), and Did Not Meet Expectations (below 75%).

Data collection involved several steps. First, formal permission was obtained from the Schools Division Superintendent of Malaybalay City and the Director of Valencia Colleges Incorporated. Once permission was granted, the researcher distributed the questionnaires to the participating schools, ensuring approval from the school superintendent and respective school heads. Face-to-face meetings were held with the teachers, during which the researcher explained the study's purpose and gave participants sufficient time to complete the questionnaires. The completed surveys were then collected for further analysis. In some cases, the researcher enlisted the help of colleagues to assist with the distribution, collection, and organization of the data.

To analyze the data, the following descriptive statistics were used. Mean and Standard Deviation was used to determine the teachers' level of implementation of digital instructional materials in their Araling Panlipunan lessons.Frequency Count and Percentage was used to measure the academic achievement of the students. Pearson r Product Moment Correlation Coefficient was used to examine the relationship between the teachers' implementation of digital instructional materials and the academic performance of students.

Findings

The objective of this study was to assess the extent to which teachers in Malaybalay City District 1, Division of Malaybalay City, have implemented digitalized instructional materials in their Araling Panlipunan classes, and to explore the impact of this implementation on learners' academic achievement during the post-pandemic period in the School Year 2022-2023.

The study specifically aimed to evaluate the implementation of digitalized instructional materials across three key dimensions: accessibility, active engagement, and advocacy for inclusion. It sought to examine the correlation between the extent of digitalized instructional material usage in Araling Panlipunan classes and learners' academic performance within District 1, Malaybalay City.

The major findings of the study revealed that, there was an increased utilization of digitalized Instructional Materials. The study found a significant increase in the use of digitalized instructional materials in District 1 following the pandemic. This increase was particularly evident in the areas of accessibility, active engagement, and inclusion, with teachers placing greater emphasis on these elements during the 2022-2023 school year. Moreover, there was an improved academic achievement among learners. The data indicated a noticeable improvement in students' academic performance in Araling Panlipunan. Learners showed enhanced academic achievement, which was positively associated with the integration of digitalized instructional materials. Finally, there was a correlation between implementation and achievement. The study explored the relationship between the teachers' level of implementation of digitalized instructional materials and the academic achievement of learners. It identified a positive correlation, suggesting that the more effectively digital tools were integrated into Araling Panlipunan classes, the higher the students' academic performance.

Conclusions

In the light of the findings, the following conclusions were formulated.

The findings suggest that in response to the pandemic, teachers in District 1, Division of Malaybalay City have adopted digitalized instructional materials. This has been achieved by ensuring that learners have access to digitalized learning materials, actively engaging them with these materials, and promoting inclusivity, particularly with regard to diverse cultural backgrounds. These efforts have been observed during the School Year 2022-2023.

The learners exhibited commendable performance in their academic pursuits, particularly in the subject of Araling Panlipunan, where they achieved a significantly high level of proficiency. This achievement is indicative of the successful integration of digitalized instructional materials, which were implemented extensively following the onset of the pandemic.

Based on the analysis, it can be inferred that there is a positive correlation between the level of implementation of digitalized instructional materials and the academic achievement of learners in Araling Panlipunan in the District 1 of Malaybalay City Division. This conclusion is drawn from the observation that higher levels of accessibility, active engagement, and advocacy for inclusion in the use of digitalized instructional materials lead to greater impact on learners' academic achievement.

Recommendations

According to the results and deductions, the subsequent suggestions are hereby presented.

Teachers can maintain a high level of implementation of digitalized instructional materials by ensuring accessibility, active engagement, and advocacy for inclusion. This can be achieved by providing learners with appropriate digitalized instructional materials that are accessible to them. Additionally, teachers should ensure that these digitalized learning materials promote active learning among learners and guarantee the inclusion of diverse cultural backgrounds in the District 1, Division of Malaybalay City for the school year 2022-2023.

The school administrators in District 1, Division of Malaybalay City have implemented a strategy to enhance the performance of students in the Araling Panlipunan subject. This strategy involves the provision of diverse performance tasks by the school heads, aimed at reinforcing the achievement of a very satisfactory grade among the learners. Additionally, the school heads have recognized the diligent efforts of the students through quarterly recognition ceremonies. The objective of these ceremonies is to boost the self-confidence and self-worth of the learners, as well as their parents, in order to foster a strong partnership in the students' educational journey.

Within the context of the Malaybalay City Division, it is recommended that school administrators take proactive measures to promote the adoption of instructional materials that support the use of digital technology in teaching. This is crucial in order to maintain a high level of implementation of digitalized instructional materials among teachers. The focus should be on ensuring accessibility, fostering active engagement, and promoting inclusion in the teaching and learning process. To achieve this, school heads should provide timely and relevant technical assistance to teachers and consistently support learners in their lessons and activities. It is important to note that these efforts should be made regardless of whether they directly impact the academic achievement of learners in the subject of Araling Panlipunan in District 1.

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