
Effectiveness of Grade 1 Self-Learning Modules of Public Elementary Teachers In Alaminos City Division: Basis For A Capacity-Building Program

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ABSTRACT

This study investigated the effectiveness of Grade 1 Self-Learning Modules (SLMs) among thirty-eight public elementary school teachers in the Alaminos City Division using a descriptive-correlational research design. The findings revealed that the respondents were experienced and academically qualified educators with one to three years of experience utilizing SLMs. Teachers perceived the challenges associated with implementing SLMs—such as difficulties with independent task completion, limited parental support, misaligned content pace, and insufficient feedback mechanisms—as moderately serious. Nevertheless, they evaluated the modules as moderately to highly effective in developing reading comprehension, mathematical skills, self-regulated learning, and learner independence. Statistical analyses using Kendall's Tau-b and Biserial correlation indicated no significant relationships between teacher profile variables and either the severity of problems encountered or the perceived effectiveness of the modules, demonstrating that outcomes were influenced more by systemic and contextual factors than by individual teacher demographics. Ultimately, the study recommended enhancing module design, supplying adequate learning resources, strengthening feedback systems, offering teacher capacity building, and conducting parental orientations to optimize modular instruction in early-grade education.

Keywords: *Academic standing, Effectiveness of Self-Learning Modules (SLMs), Grade 1 Learners, Modular Learning, Self-Learning Modules (SLMs)*

INTRODUCTION

The quality of instructional materials remains one of the most significant determinants of learners' academic achievement, particularly in the foundational years of basic education. Among these materials, Self-Learning Modules (SLMs) have become an essential component of learner-centered instruction because they enable learners to acquire knowledge independently while allowing teachers to facilitate learning through carefully designed activities. Although face-to-face instruction has resumed in many countries after the COVID-19 pandemic, SLMs continue to be widely utilized as supplementary learning resources,

intervention materials, remediation tools, and take-home learning packages. Consequently, evaluating their effectiveness remains an important concern for educators and policymakers.

Internationally, modular learning and self-directed instructional materials have consistently demonstrated positive effects on learners' academic performance, motivation, and independent learning skills. Research indicates that well-designed learning modules promote active engagement, improve mastery of competencies, and accommodate learners' diverse learning needs (UNESCO, 2023). Likewise, the Organization for Economic Co-operation and Development (OECD, 2023) emphasized that quality learning resources significantly influence learning recovery and educational resilience following the disruptions brought about by the COVID-19 pandemic. Studies further revealed that modular instruction enhances learner autonomy, critical thinking, and academic achievement when instructional materials are developmentally appropriate, clearly organized, and supported by effective teacher facilitation (Cramer et al., 2018). These findings underscore the continuing relevance of self-learning modules in promoting equitable and flexible education.

The theoretical foundation of SLMs is anchored in Knowles' Theory of Self-Directed Learning (1975), which posits that learners become more effective when they actively participate in planning, implementing, and evaluating their own learning. Although Grade 1 learners are still developing independent learning skills, appropriately designed modules, combined with teacher guidance and parental support, cultivate early self-regulation, responsibility, and foundational literacy and numeracy competencies. This learner-centered approach is likewise supported by constructivist learning theory, which views learners as active participants in constructing knowledge through meaningful learning experiences.

In the Philippine context, Self-Learning Modules became the primary instructional delivery resource during the implementation of distance learning under the Basic Education Learning Continuity Plan. The Department of Education developed contextualized and Most Essential Learning Competencies (MELCs)-aligned SLMs to ensure continuous learning despite school closures. Numerous studies reported that SLMs enabled schools to sustain instruction and provided learners with structured opportunities to continue learning at home (Bacomo et al., 2022; Olipas, 2022). However, researchers likewise documented several challenges affecting the effectiveness of SLMs, including inconsistencies in module quality, learners' reading difficulties, inadequate parental guidance, limited teacher feedback, and insufficient learning resources (Ubaldo, 2024). These concerns became more evident among beginning readers in the primary grades, whose learning largely depends on teacher scaffolding and family support.

With the implementation of the MATATAG Agenda, particularly its focus on improving foundational literacy and numeracy, there is renewed emphasis on ensuring that instructional materials effectively support learners' mastery of essential competencies. Grade 1 represents a critical stage in children's educational development because it establishes the basic skills necessary for future academic success. Consequently, evaluating the effectiveness of Grade 1 Self-Learning Modules remains highly relevant even in the post-pandemic educational landscape.

In the local context, the Schools Division of Alaminos City continues to utilize Self-Learning Modules as supplementary instructional materials for remediation, intervention, and home-based learning support. Despite their continued use, limited empirical evidence exists regarding the effectiveness of these modules from the perspective of public elementary teachers within the division. Existing local studies have primarily focused on learners' academic performance, perceptions of modular learning, or implementation challenges, while few have comprehensively examined the instructional effectiveness of Grade 1 SLMs in relation to content quality, instructional design, learner engagement, assessment activities, and usability in actual classroom practice.

Furthermore, although numerous studies have examined modular learning during the pandemic, there remains a paucity of research investigating the sustained effectiveness of Grade 1 Self-Learning Modules in the post-pandemic educational setting. Previous investigations were generally conducted during emergency remote learning and emphasized learners' experiences, parents' participation, or implementation issues rather than teachers' professional evaluation of the instructional quality of SLMs. Moreover, few studies have been undertaken within the Schools Division of Alaminos City, creating a contextual gap that limits evidence-based improvements in locally developed instructional materials.

Recognizing these gaps, the present study seeks to determine the effectiveness of Grade 1 Self-Learning Modules as assessed by public elementary teachers in the Schools Division of Alaminos City. Specifically, the study intends to provide empirical evidence that may guide curriculum developers, school administrators, and classroom teachers in enhancing the design, implementation, and utilization of Self-Learning Modules. The findings are likewise expected to contribute to the continuous improvement of instructional materials that support foundational learning and align with the Department of Education's goals for quality, inclusive, and learner-centered basic education.

Statement of the Problem

This study determined the effectiveness of Grade 1 Self-Learning Modules of public elementary teachers in Alaminos City Division.

Specifically, it answered the following problems.

1. What is the profile of the teacher-respondents in terms of:
 - a. Position;
 - b. Sex;
 - c. Age;
 - d. Marital status;
 - e. Years in service;
 - f. Highest educational attainment;
 - g. Number of Self-Learning Modules (SLMs) created;
 - h. Number of years utilizing Self-Learning Modules (SLMs);
 - i. Number of seminars, trainings, or workshops attended related to module writing; and
 - j. Average monthly family income?

2. What is the level of seriousness of the problems encountered by teachers in using and administering Grade 1 Self-Learning Modules?
3. What is the perceived level of effectiveness of the Grade 1 Self-Learning Modules for Grade 1 learners as perceived by the teachers?
4. Is there a significant relationship between the teachers' profile and the level of seriousness of the problems encountered in using and administering Grade 1 Self-Learning Modules?
5. Is there a significant relationship between the teachers' profile and the perceived level of effectiveness of the Grade 1 Self-Learning Modules?
6. What capacity building for Grade 1 teachers can be proposed based on the findings?

Scope and Delimitations

This study focused on determining the effectiveness of Grade 1 Self-Learning Modules (SLMs) and the problems encountered in their implementation in the Schools Division of Alaminos City during the School Year 2024–2025. Specifically, the study described the respondents' profile in terms of position, sex, age, marital status, years in service, highest educational attainment, number of SLMs created, number of years utilizing SLMs, number of seminars/trainings/workshops attended on module writing, and average monthly family income. It also assessed the effectiveness of the SLMs, determined the seriousness of the problems encountered in their utilization, examined the relationship between the respondents' profile and the effectiveness of the SLMs and seriousness of the identified problems, and formulated recommendations for improving the implementation of Grade 1 SLMs.

The respondents of the study consisted of 38 Grade 1 public elementary school teachers from the Schools Division of Alaminos City. The respondents included Teacher I, Teacher II, Teacher III, and Master Teacher I, with varying demographic and professional characteristics. Data were gathered using a validated researcher-made questionnaire and were analyzed using appropriate descriptive and inferential statistical techniques.

This study was delimited to the perceptions and experiences of Grade 1 teachers regarding the effectiveness and implementation of Self-Learning Modules. It did not include teachers from other grade levels, school heads, learners, or parents as respondents. Likewise, the study was confined to public elementary schools in the Schools Division of Alaminos City during the specified school year. The findings were based solely on the responses provided by the participants and were therefore subject to the inherent limitations of survey research, including respondents' accuracy and honesty.

Review of Related Literature

The review of related literature explores the use, effectiveness, and theoretical foundations of self-learning modules (SLMs) in both local and international educational contexts. It focuses on how SLMs, particularly in the Alternative Learning System (ALS) and Modular Distance Learning (MDL), support self-directed learning, professional development, and student academic performance. It also highlights how digital tools and constructivist principles are integrated into module design, and how learner motivation, attitudes, and autonomy influence educational outcomes. The literature further examines challenges and

limitations in the use of SLMs, especially in rural and low-access areas, underscoring the need for responsive and context-specific instructional design.

Theoretical Framework

Self-directed learning modules (SLMs) have gained prominence as a flexible and accessible approach to professional development and education. Grounded in the principles of constructivism, self-directed learning, and instructional design models, the effectiveness of SLMs is shaped by various factors including learner autonomy, motivation, self-regulation, and personal responsibility. This theoretical framework explores the interplay between these key concepts and the role of SLMs in enhancing digital literacy among educators, particularly in the context of modular distance learning.

Constructivist Learning Theory

Constructivism posits that learners actively construct their own knowledge through experiences and interactions with their environment (Driscoll, 2007; Duffy & Cunningham, 1996). This theory serves as the foundation for SLMs, as it emphasizes active learning, exploration, and reflection. The Google Literacy Module, developed for Malaysian primary teachers, aligns with constructivist principles by offering interactive activities, real-life applications, and opportunities for self-assessment (Shahrudin, Din, & Othman, 2023). By engaging in authentic learning experiences, teachers are encouraged to build upon prior knowledge and develop a deeper understanding of Google Apps for educational purposes.

Self-Directed Learning Theory

Self-directed learning (SDL) refers to the ability of individuals to take initiative in their own learning process, setting goals, selecting learning strategies, and evaluating their progress (Francis, 2017). Knowles (1975) defines SDL as a process in which learners take responsibility for their education, making it an essential component of self-learning modules. Four dimensions of SDL are particularly relevant to this study:

Self-Regulation – The ability to set goals, monitor progress, and adjust learning strategies to achieve desired outcomes (National Research Council, 2012; Pintrich, 2004). This aspect ensures that learners remain on track and make necessary modifications to their learning approaches.

Motivation – The internal drive to engage in learning activities, influenced by intrinsic and extrinsic factors (Pink, 2009; Ryan & Deci, 2000). A growth mindset enhances motivation by fostering perseverance and resilience (Dweck, 2006; Duckworth, 2016).

Personal Responsibility – The sense of accountability for one's own learning progress, ethical decision-making, and adherence to learning goals (Brockett & Hiemstra, 1991; Battelle for Kids, 2019).

Autonomy – The ability to make informed choices regarding learning pathways, resources, and assessments (OECD, 2005; Reinders, 2010). Autonomous learners engage in self-reflection and continuously refine their learning strategies.

Instructional Design Models

The development of effective SLMs requires structured instructional design models that guide the creation and implementation of learning materials. Two models utilized in the Google Literacy Module study include:

The ADDIE Model – A systematic instructional design framework that consists of five phases: Analysis, Design, Development, Implementation, and Evaluation. This model ensures

that the SLMs are aligned with learners' needs and provide meaningful learning experiences (Branch, 2009).

The UDin Model – A framework emphasizing usability, digital accessibility, and interactive learning. This model supports the integration of multimedia elements and ensures that learning materials cater to diverse learners (Shahrudin, Din, & Othman, 2023).

Impact of Self-Learning Modules in Distance Learning

In the Philippines, Modular Distance Learning (MDL) has been widely adopted, particularly in response to the COVID-19 pandemic. Self-learning modules have played a crucial role in sustaining education despite limited face-to-face interactions (DepEd, 2020). However, challenges such as student demotivation (Bordeos, 2021) and concerns over academic integrity (Bautista & Pentang, 2022) have been identified. Research suggests that learner attitudes significantly impact academic performance in MDL settings (Ibañez & Pentang, 2021; Pekrun et al., 2017). Thus, an effective SLM should consider these factors to enhance student engagement and learning outcomes.

Relevance to Professional Development

Professional development programs must be designed to meet the diverse needs of educators. Traditional training methods, such as workshops and seminars, often fail to address individualized learning requirements (Darling-Hammond et al., 2017). Integrating self-learning modules into professional development allows teachers to develop digital competencies at their own pace, ensuring continuous improvement in their teaching practices. By incorporating Google Apps into instructional strategies, educators can enhance collaboration and active learning, ultimately benefiting students (Li & Lalani, 2020).

This theoretical framework underscores the significance of constructivist learning theory, self-directed learning, and instructional design models in the development and effectiveness of self-learning modules. By fostering learner autonomy, motivation, and self-regulation, SLMs serve as a valuable tool for improving digital literacy and professional competencies among educators. The findings from this study contribute to the ongoing discourse on the role of modular learning in education, offering insights for curriculum developers, policymakers, and educational practitioners.

Conceptual Framework

The conceptual framework of this study aims to explore the relationship between the respondents' profiles, the challenges in using and administering Grade 1 Self-Learning Modules (SLMs), and their effectiveness in enhancing the academic performance of Grade 1 learners. The framework integrates variables to analyze the seriousness of the problems encountered, the effectiveness of the SLMs, and potential recommendations for improvement.

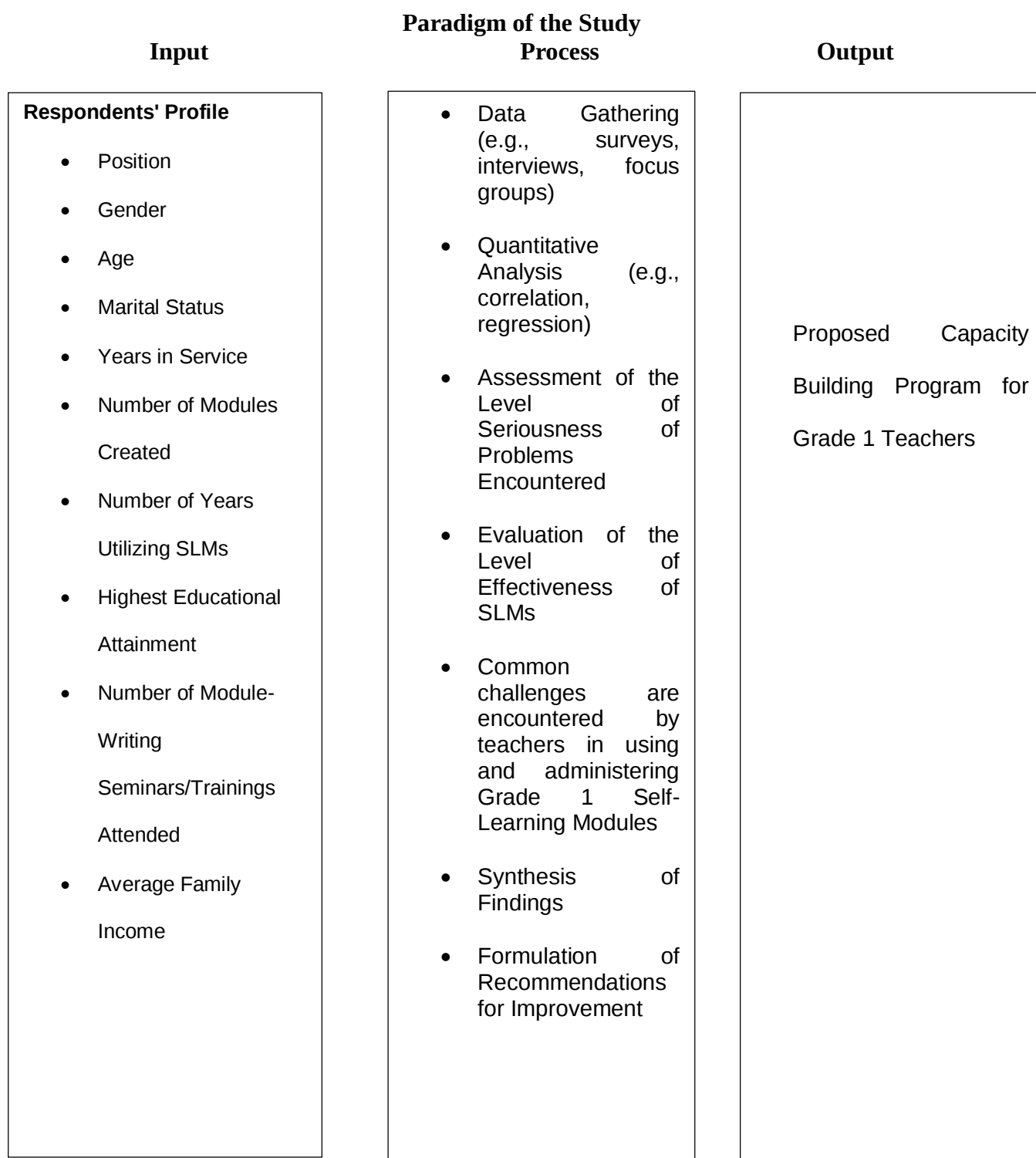


Figure 1: Paradigm of the Study

The image shows a Paradigm of the Study in the form of an IPO (Input–Process–Output) model, which presents a structured overview of how your research will be conducted.

Input

These are the independent variables or factors that are being examined in the study. They refer to the profile of the teacher-respondents and include: Position – Teacher’s job designation or rank; Gender – Male or female; Age – Chronological age of the teacher; Marital Status – Whether married, single, etc.; Years in Service – How long the teacher has been teaching; Number of Modules Created – Experience in developing self-learning modules; Number of Years Utilizing SLMs – Experience in using SLMs for instruction; Highest Educational Attainment – The teacher’s academic qualifications; Number of Module-Writing Seminars/Trainings Attended – Extent of professional development; Average Family Income – Socioeconomic factor that may influence access to resources

These inputs aim to assess how teachers' backgrounds and experiences affect their perceptions and actual use of SLMs.

Process

This refers to the methodological steps the researcher will take to analyze the data: Data Gathering – Collection of information through surveys, interviews, or focus group discussions. Quantitative Analysis – Use of statistical methods (e.g., correlation, regression) to explore relationships between variables. Assessment of the Level of Seriousness of Problems Encountered – This is the mediating variable, measuring the challenges teachers face in using SLMs. Evaluation of the Effectiveness of SLMs – How well SLMs are working based on specific indicators. Synthesis of Findings – Interpretation and integration of data results. Formulation of Recommendations for Improvement – Based on findings, the researcher proposes solutions

This process ensures a scientific and evidence-based approach to analyzing the effectiveness of SLMs.

Output

These are the expected results of the study:

Level of Effectiveness of Grade 1 Self-Learning Modules
This is the dependent variable, evaluated through various indicators: Content Quality; Comprehensibility; Engagement and Motivation; Skill Development; Learner Independence; Parental/Guardian Support; Assessment and Feedback; Alignment with Learning Outcomes.
Recommendations for Improving SLMs
Based on the challenges and effectiveness levels, the study will propose: Strategies to improve content and delivery; Enhancements in module design; Better implementation practices; Stronger teacher support and training

METHODOLOGY

The discussion of the research design to be used in this study, the subjects, data-gathering instrument, and procedure, and the statistical tools to be used.

Research Design

This study employed a descriptive-correlational research design. Descriptive-correlational research is a quantitative research design that describes existing conditions and examines the relationships among variables without manipulating them or establishing cause-and-effect relationships (Creswell & Creswell, 2018). This is used to assess the effectiveness of Grade 1 Self-Learning Modules (SLMs) in public elementary schools in the Alaminos City Division. This design is appropriate because it allows for both the systematic description of

existing conditions related to the use of SLMs and the examination of relationships among key variables, including teachers' profiles, challenges encountered, and the perceived effectiveness of SLMs.

Descriptive research focused on documenting and analyzing the respondents' demographic characteristics (e.g., position, age, years in service, highest educational attainment, and school size) and the challenges they encounter in the use and administration of SLMs. It explored the perceived effectiveness of SLMs in improving students' academic performance.

Correlational research examined the relationships among variables to determine how teachers' profiles and the challenges they face influence the effectiveness of SLMs. The study analyzed whether certain factors (such as years in service or school size) correlate with the perceived level of effectiveness of SLMs in improving learners' academic performance.

By utilizing this combined approach, the study aimed to provide insights into how SLMs are currently being used, the barriers to their effectiveness, and how different factors contribute to their overall success in Grade 1 education. The findings was valuable for policy recommendations and improvements in instructional module design and implementation.

Research Steps

This study was delimited to the perceptions and experiences of Grade 1 teachers regarding the effectiveness and implementation of Self-Learning Modules. It did not include teachers from other grade levels, school heads, learners, or parents as respondents. Likewise, the study was confined to public elementary schools in the Schools Division of Alaminos City during the specified school year. The findings were based solely on the responses provided by the participants and were therefore subject to the inherent limitations of survey research, including respondents' accuracy and honesty.

Data Collection and Sample Selection

The primary instrument used in this study was a researcher-made questionnaire designed to determine the effectiveness of Grade 1 Self-Learning Modules (SLMs) in the Schools Division of Alaminos City. The questionnaire was developed based on an extensive review of related literature and studies on Self-Learning Modules and was aligned with the objectives of the study. It consisted of four sections corresponding to the variables investigated.

Data Analysis Methods

The first section elicited the demographic profile of the teacher-respondents. Specifically, it gathered information on their position, sex, age, marital status, years in service, highest educational attainment, number of Self-Learning Modules created, number of years utilizing Self-Learning Modules, number of seminars, trainings, or workshops attended related to SLM development and implementation, and average monthly family income. These variables were used to describe the respondents and to determine whether significant relationships existed between their profile characteristics and the perceived effectiveness of Grade 1 Self-Learning Modules.

The second section measured the level of seriousness of the problems encountered by teachers in the use and administration of Self-Learning Modules. A five-point Likert scale was employed to determine the degree of seriousness of the identified challenges, with the

following descriptive equivalents: 5 – Very Serious, 4 – Serious, 3 – Moderately Serious, 2 – Slightly Serious, and 1 – Not Serious. The questionnaire covered five dimensions, namely: (1) content complexity and comprehensibility, (2) student engagement and motivation, (3) assessment and feedback mechanisms, (4) teacher workload and time constraints, and (5) logistical and technological concerns. These dimensions were included to identify implementation issues that may influence the effectiveness of Grade 1 Self-Learning Modules and to determine areas requiring improvement.

The third section assessed the perceived level of effectiveness of Grade 1 Self-Learning Modules. A separate five-point Likert scale was utilized, with the following descriptive equivalents: 5 – Highly Effective, 4 – Effective, 3 – Moderately Effective, 2 – Ineffective, and 1 – Highly Ineffective. The effectiveness of the modules was evaluated across eight dimensions: content quality, comprehensibility, learner engagement and motivation, skill development, learner independence, parental or guardian support, assessment and feedback, and alignment with the intended learning outcomes. These indicators were selected to provide a comprehensive assessment of the instructional quality and educational value of the Self-Learning Modules from the teachers' perspective.

To complement the quantitative data, the fourth section consisted of open-ended questions that solicited respondents' experiences and insights regarding the implementation of Grade 1 Self-Learning Modules. The respondents were encouraged to describe the challenges they encountered, identify good practices in the utilization of SLMs, and provide recommendations for improving the development, implementation, and administration of the modules. The qualitative responses served to enrich and support the interpretation of the quantitative findings.

Research Hypotheses and Validation

This study tested the following hypotheses at the 0.05 level of significance:

1. There is no significant relationship between the profile of the teacher-respondents and the level of seriousness of the problems encountered in the use and administration of Grade 1 Self-Learning Modules.
2. There is no significant relationship between the profile of the teacher-respondents and the perceived effectiveness of Grade 1 Self-Learning Modules in improving the academic performance of Grade 1 learners.

Study Limitations and Ethical Considerations

The study adhered to ethical protocols by obtaining informed consent from all participants, ensuring anonymity and confidentiality, and allowing participants to withdraw from the study at any time. Furthermore, ethical issues encompassed the imperative to ensure the respectful portrayal of participants' views in the final analysis and reporting.

RESULTS AND DISCUSSION

Perceived Level of Effectiveness of Self-Learning Modules

The results presented in Table 3 indicate that teachers generally perceived the Self-Learning Modules (SLMs) as moderately to highly effective in facilitating the learning of Grade 1 pupils. The findings suggest that despite the implementation challenges identified in the previous section, teachers recognize the instructional value of SLMs in promoting foundational learning competencies, reinforcing previously taught lessons, and supporting learners with diverse educational needs. The predominance of responses under the Highly Effective (HE) and Moderately Effective (ME) categories demonstrates that SLMs continue to serve as valuable instructional resources, particularly in contexts where flexible or distance learning is necessary.

Among the indicators, teachers most strongly perceived that SLMs contribute to the development of self-regulated learning skills, engage students in independent learning, and support learners with varying learning paces and abilities. These findings are consistent with the principles of Self-Directed Learning Theory (Knowles, 1975; Francis, 2017), which emphasize that learners gradually develop autonomy, self-regulation, and responsibility through appropriately designed learning experiences. Although Grade 1 learners are still developing these competencies, teachers recognized that SLMs provide structured opportunities for pupils to practice independent work, complete learning tasks at their own pace, and assume greater responsibility for their learning.

The findings likewise corroborate the study of Martin and Bolliger (2021), who reported that well-designed SLMs foster self-regulated learning by enhancing learners' goal-setting, persistence, time management, and ownership of learning. Their research demonstrated that modular instruction encourages students to become active participants in the learning process rather than passive recipients of information. Similarly, the present findings suggest that teachers perceive SLMs as effective in cultivating independent learning behaviors, even among beginning learners, provided that adequate guidance from teachers and parents remains available.

The perceived effectiveness of SLMs in improving reading comprehension and enhancing mathematical understanding and problem-solving skills further supports previous empirical findings. These results are consistent with Butial et al. (2022), who found that modular instruction significantly improved learners' reading comprehension, vocabulary development, and language proficiency among primary school pupils. Likewise, the findings agree with Ali and Siddiqui (2020), who concluded that SLMs improve learners' conceptual understanding and mathematical problem-solving by presenting lessons in manageable and sequential learning segments. Teachers in the present study similarly acknowledged that SLMs help strengthen learners' foundational literacy and numeracy skills, which are essential competencies during the early elementary years.

Furthermore, teachers perceived SLMs as effective in reinforcing previously taught lessons and addressing learning gaps among learners. This finding supports the study of Cobanban and Panares (2023), which revealed that consistent utilization of SLMs enables learners to revisit prior knowledge, reinforce mastery of competencies, and improve academic performance during transition periods. Their study emphasized that repeated engagement with learning materials strengthens retention and allows learners to connect previous learning with newly introduced concepts. The present findings indicate that teachers similarly value SLMs as supplementary instructional resources that reinforce classroom learning and provide additional practice opportunities.

The positive perceptions regarding the ability of SLMs to support learners with different learning paces and abilities are likewise consistent with the literature emphasizing the flexibility of self-learning modules. According to Dabbagh and Bannan-Ritland (2005) and Hamza and Guldin (2020), one of the major strengths of SLMs lies in allowing learners to study according to their individual pace, revisit lessons as needed, and progress through learning activities based on their readiness. This flexibility is particularly beneficial in Grade 1 classrooms, where considerable variation exists in learners' literacy readiness, prior knowledge, and cognitive development. By allowing pupils to spend additional time on difficult lessons while progressing independently through familiar concepts, SLMs help accommodate individual learning differences.

Nevertheless, the predominance of Moderately Effective responses for several indicators suggests that teachers believe the instructional potential of SLMs has not yet been fully realized. Specifically, the indicators related to real-life application, critical thinking, and engaging instructional design received the highest frequencies under the moderately effective category. These findings imply that while SLMs effectively facilitate mastery of basic knowledge and skills, they may be less successful in promoting higher-order thinking, authentic learning experiences, and active learner engagement.

This observation aligns with the principles of Constructivist Learning Theory, which posits that meaningful learning occurs when learners actively construct knowledge through authentic experiences, inquiry, reflection, and interaction with their environment (Driscoll, 2007; Brooks & Brooks, 1993; Schunk, 2012). Modules that rely primarily on repetitive drills, worksheets, or recall-based activities may strengthen basic competencies but provide limited opportunities for learners to apply concepts to real-life situations or develop higher-order thinking skills. Consequently, the moderate ratings on these indicators suggest that many SLMs remain largely content-driven rather than fully embodying constructivist instructional principles.

The findings also reinforce the conclusions of Vitasa (2023), who reported that contextualized modules increase learner engagement and comprehension but require carefully planned instructional design, authentic learning activities, and effective feedback mechanisms to maximize learning outcomes. Similarly, Shahrudin, Din, and Othman (2023) emphasized that modules developed using the ADDIE instructional design model and grounded in constructivist principles demonstrate greater usability and effectiveness because they integrate learner-centered activities, meaningful contexts, and continuous evaluation. The present findings suggest that further refinement of SLM design may increase their effectiveness in promoting critical thinking, authentic problem-solving, and learner engagement among Grade 1 pupils.

Moreover, the moderate effectiveness ratings may also reflect the implementation challenges identified in Table 2. Teachers previously reported concerns regarding limited teacher interaction, insufficient parental support, technical issues, and developmental mismatches between module content and learners' abilities. These contextual barriers likely influence teachers' perceptions of SLM effectiveness. In other words, while the instructional materials themselves are viewed positively, their effectiveness depends greatly on the quality of implementation, availability of instructional support, and learners' readiness to engage in self-directed activities. This observation supports the findings of Gueta and Janer (2021) and Dizon Jr. et al. (2021), who emphasized that the success of modular learning depends not only on the quality of the modules but also on sustained teacher guidance, parental involvement, and contextualized instructional support.

From an educational perspective, these findings suggest several important implications. First, curriculum developers should continue enhancing SLMs by incorporating developmentally appropriate, contextualized, and interactive learning activities that foster inquiry, creativity, collaboration, and higher-order thinking. Second, teachers should complement modular instruction with regular feedback, formative assessment, and guided learning opportunities to strengthen learner understanding and motivation. Third, schools should provide continuous orientation and support for parents to enable them to serve as effective learning facilitators at home, particularly for early-grade learners who continue to rely heavily on adult assistance. Finally, systematic evaluation and validation of SLMs should be institutionalized to ensure that instructional materials remain learner-centered, engaging, and responsive to the diverse needs of Grade 1 pupils.

Overall, the findings demonstrate that teachers perceive Self-Learning Modules as effective instructional resources that promote foundational academic skills, independent learning, and differentiated instruction. However, maximizing their instructional potential requires continuous improvement in module design, stronger instructional support systems, and greater alignment with constructivist and learner-centered pedagogical principles. Such enhancements will enable SLMs to move beyond facilitating content mastery toward developing critical thinking, authentic learning, and lifelong learning skills among young learners.

SUMMARY

This study determined the effectiveness of the Grade 1 Self-Learning Modules (SLMs) as perceived by public elementary school teachers in the Schools Division of Alaminos City. The findings revealed that the teacher-respondents were predominantly Teacher III, female, married, and within the age range of 26–35 years. Most had served for 11 years or more and had pursued postgraduate studies, with the majority having master's units or master's degrees. While many had created one to three Self-Learning Modules and had utilized SLMs for one to three years, a considerable number had not attended formal seminars, trainings, or workshops specifically related to module writing.

Teachers generally perceived the problems encountered in using and administering Grade 1 Self-Learning Modules as moderately serious. The major concerns included learners' difficulty in accomplishing learning tasks independently, limited teacher-learner interaction, inadequate parental support, insufficient instructional resources, technical issues affecting module usability, and the misalignment of some module contents with the developmental needs of Grade 1 learners.

The Grade 1 Self-Learning Modules were perceived to be moderately to highly effective. The modules effectively enhanced learners' reading comprehension, numeracy skills, independent learning, self-regulation, reinforcement of previously learned concepts, and accommodation of varying learning abilities. However, the modules were only moderately effective in promoting higher-order thinking skills, authentic real-life application of learning, and interactive learning experiences.

The results further showed that there was no statistically significant relationship between the teachers' profile variables and the level of seriousness of the problems encountered in using and administering Grade 1 Self-Learning Modules. Likewise, no significant relationship was found between the teachers' profile variables and the perceived effectiveness of the Self-Learning Modules. These findings indicate that teachers, regardless of their demographic and professional characteristics, shared similar perceptions regarding both the implementation challenges and the effectiveness of the modules.

The respondents likewise identified recurring implementation challenges, including inadequate instructional resources, learners' reading and comprehension difficulties, limited parental support or excessive parental assistance, poor quality and clarity of some module contents, misalignment between learning activities and learners' developmental abilities, and limited opportunities for teacher feedback and assessment. To address these concerns, they recommended strengthening quality assurance and validation procedures, improving module design and contextualization, providing adequate instructional resources, enhancing teachers' competencies in module development, and strengthening home-school partnerships through regular parent orientation and communication.

CONCLUSIONS

The findings indicate that the Grade 1 teachers in the Schools Division of Alaminos City were generally experienced and academically qualified professionals. However, despite their educational qualifications and years of teaching experience, many had limited formal preparation in Self-Learning Module writing and development, suggesting the need for specialized professional development in instructional material preparation.

The Grade 1 Self-Learning Modules were generally perceived as effective instructional materials that support foundational literacy, numeracy, learner independence, and self-regulated learning. Nevertheless, improvements are still necessary to strengthen the modules' capacity to develop higher-order thinking skills, provide authentic learning experiences, and address the developmental needs of young learners.

The problems encountered in using and administering Self-Learning Modules were perceived as moderately serious and were largely associated with learner readiness, parental support, instructional resources, module quality, and implementation conditions rather than with teachers' demographic or professional characteristics. The absence of significant relationships between teacher profile variables and both the seriousness of problems and the perceived effectiveness of the modules indicates that these concerns are systemic and commonly experienced across teachers.

The findings further suggest that the successful implementation of Self-Learning Modules depends not only on the quality of the instructional materials but also on effective collaboration among teachers, school administrators, parents, curriculum developers, and the Department of Education. Continuous improvement of module design, instructional support systems, and stakeholder collaboration is therefore essential to maximize the effectiveness of modular learning for Grade 1 learners.

RECOMMENDATIONS

The Department of Education should strengthen the quality assurance, validation, contextualization, and periodic review of Grade 1 Self-Learning Modules to ensure that learning activities, language, assessments, and instructional content are developmentally appropriate, learner-centered, and aligned with the Most Essential Learning Competencies. Continuous capability-building programs on module writing, contextualization, learner-centered instructional design, and formative assessment should likewise be institutionalized for teachers.

School heads should strengthen Learning Action Cells (LACs) and establish school-based quality assurance mechanisms to support the collaborative review and enhancement of Self-Learning Modules. Schools should also provide systematic learner monitoring, remediation, consultation, and feedback mechanisms while regularly conducting parent orientation programs to strengthen home-school collaboration.

Teachers should continuously improve the design and implementation of Self-Learning Modules by incorporating clear instructions, contextualized examples, engaging learning activities, differentiated instruction, authentic assessment tasks, and timely formative feedback. Collaboration among teachers in developing and sharing innovative instructional materials and best practices should likewise be encouraged.

Parents and guardians should actively participate in school orientation activities, establish structured home learning routines, provide appropriate guidance while encouraging learner independence, and maintain regular communication with teachers regarding learners' progress and learning needs.

Future researchers are encouraged to conduct similar studies involving learners, parents, school administrators, and curriculum developers to obtain a broader understanding of the implementation and effectiveness of Self-Learning Modules. Further investigations employing mixed-methods or experimental research designs, as well as studies involving other grade levels, learning areas, and school divisions, are likewise recommended to validate and expand the findings of the present study.

Introduction to the Proposed Capacity-Building Program

Based on the findings of the study entitled "**Effectiveness of Grade 1 Self-Learning Modules of Public Elementary Schools in Alaminos City Division: Basis for a Capacity-Building Program**," a need was identified to further strengthen the competencies of Grade 1 teachers in the development, utilization, monitoring, and evaluation of Self-Learning Modules (SLMs). Although the findings indicate that the SLMs are generally effective, continuous professional development is necessary to address areas for improvement and ensure the delivery of quality, learner-centered instruction.

In response to these findings, the proposed Capacity-Building Program was developed to provide targeted professional development activities that will enhance teachers' knowledge, skills, and instructional practices related to the effective implementation of Grade 1 Self-Learning Modules. The program is expected to contribute to improved instructional delivery, increased learner engagement, and better learning outcomes among Grade 1 pupils in the Public Elementary Schools of the Schools Division of Alaminos City.

The proposed Capacity-Building Program is presented below.

CAPACITY-BUILDING PROGRAM

Strengthening Grade 1 Teachers' Competencies in the Effective Development, Utilization, Monitoring, and Evaluation of Self-Learning Modules in Public Elementary Schools of the Schools Division of Alaminos City

I. Introduction

Self-Learning Modules (SLMs) have become an essential instructional resource in ensuring the continuity and quality of education among Grade 1 learners in the Schools Division of Alaminos City. The findings of the study entitled "**Effectiveness of Grade 1 Self-Learning Modules of Public Elementary Schools in Alaminos City Division: Basis for a Capacity-Building Program**" revealed that while the SLMs were generally effective, there are areas

that require further enhancement, particularly in module development, contextualization, learner engagement, assessment practices, parental involvement, and instructional monitoring. To address these identified needs, this Capacity-Building Program is proposed to strengthen teachers' competencies through targeted professional development activities that will improve the quality and effectiveness of Grade 1 Self-Learning Modules and ultimately enhance learners' academic achievement.

II. General Objective

To strengthen the competencies of Grade 1 teachers in the effective development, utilization, monitoring, and evaluation of Self-Learning Modules to improve instructional delivery and learner performance in the Schools Division of Alaminos City.

III. Specific Objectives

At the end of the implementation of the program, the participants shall be able to:

- enhance their competencies in developing quality Grade 1 Self-Learning Modules;
- apply contextualization and localization strategies in preparing learning activities;
- improve assessment, monitoring, and feedback practices in modular learning;
- implement learner-centered strategies that promote active participation and independent learning;
- strengthen collaboration with parents and other stakeholders in supporting modular instruction;
- develop appropriate intervention plans for struggling learners; and
- participate actively in coaching, mentoring, and Learning Action Cell (LAC) sessions for continuous professional growth.

IV. Plan of Action

The findings of the study indicated that some Grade 1 teachers need further enhancement in the effective development and utilization of Self-Learning Modules. To address this need, a **Seminar-Workshop on the Effective Development and Utilization of Grade 1 Self-Learning Modules** shall be conducted to strengthen teachers' competencies in preparing and implementing quality modules. The objective is to improve teachers' instructional practices and ensure the effective use of SLMs in classroom instruction. Success will be measured by the participation of **100% of Grade 1 teachers** and the production of improved module outputs. The activity shall involve the **Education Program Supervisor, Public Schools District Supervisors, School Heads, Master Teachers, and Grade 1 Teachers** and shall be conducted in **August** using **School MOOE and INSET Funds**.

The study also revealed the need to improve the contextualization and localization of learning activities in the Self-Learning Modules. Consequently, a **Workshop on Contextualization and Localization of Grade 1 Self-Learning Modules** shall be conducted to enable teachers to develop learning activities that are relevant to learners' local culture and experiences. The effectiveness of the workshop shall be determined by the production of contextualized modules by **at least 90% of the participating teachers**. This activity shall involve **School Heads, Master Teachers, and Grade 1 Teachers**, shall be conducted in **September**, and shall be funded through the **School MOOE**.

Another finding highlighted the need to increase learner engagement during modular instruction. In response, **quarterly Learning Action Cell (LAC) sessions on Learner-Centered Strategies for Modular Learning** shall be conducted to equip teachers with

innovative teaching strategies that promote learner participation and independent learning. The objective is to improve learner engagement and participation while using Self-Learning Modules. Success shall be measured through improved learner participation and completion rates based on monitoring reports. The activity shall involve the **School Head, LAC Coordinator, Master Teachers, and Grade 1 Teachers**, and shall be funded through the **School MOOE**.

The study further showed that teachers require enhancement in assessment, monitoring, and feedback practices. Thus, a **Training on Assessment, Monitoring, and Feedback Using Self-Learning Modules** shall be conducted to strengthen teachers' competencies in preparing valid assessment tools and providing timely feedback to learners. The expected outcome is the development and implementation of quality assessment tools aligned with the learning competencies. The **School Testing Coordinator, Master Teachers, and Grade 1 Teachers** shall participate in the training, which shall be conducted in **October** using **School MOOE**.

The findings likewise emphasized the need to strengthen parental support in modular learning. To address this concern, a **Parent Orientation and Capacity-Building Program on Supporting Grade 1 Modular Learning** shall be conducted every quarter to enhance parents' knowledge and skills in assisting their children at home. The activity aims to strengthen the partnership between the school and the home. Success shall be measured by achieving **at least 90% parent participation** and increased learner completion rates. The activity shall involve the **School Head, Grade 1 Teachers, and PTA Officers** and shall be funded through the **School MOOE and PTA Funds**.

The study also identified the need to provide timely intervention for struggling learners. Therefore, a **Workshop on Designing Remediation and Learning Recovery Plans** shall be conducted to equip teachers with effective intervention strategies for learners who encounter difficulties in accomplishing the Self-Learning Modules. The objective is to develop and implement individualized intervention plans that improve learner achievement. This activity shall involve the **Reading Coordinator, Numeracy Coordinator, and Grade 1 Teachers**, shall be conducted in **November**, and shall be funded through the **School MOOE**.

Finally, the study highlighted the importance of continuous technical assistance to sustain effective implementation of Self-Learning Modules. Hence, **Instructional Coaching, Mentoring, and Classroom Observation** shall be conducted throughout the school year to provide ongoing technical assistance, monitor classroom implementation, and support teachers in improving instructional practices. The effectiveness of this activity shall be measured through improved classroom observation ratings and coaching reports. The activity shall involve the **School Head and Master Teachers**, shall be implemented **throughout the school year**, and shall be funded through the **School MOOE**.

V. Monitoring and Evaluation

The implementation of the Capacity-Building Program shall be monitored and evaluated through attendance records, pre-test and post-test results, classroom observation reports, coaching and mentoring documentation, evaluation of contextualized Self-Learning Modules, learner achievement data, parent feedback surveys, and quarterly accomplishment reports. The School Monitoring and Evaluation Team shall regularly assess the implementation of the program and use the results to improve succeeding professional development activities.

VI. Sustainability Plan

To sustain the gains of the Capacity-Building Program, the school shall institutionalize regular Learning Action Cell (LAC) sessions focusing on Self-Learning Module development and utilization, continue instructional coaching and mentoring, conduct annual refresher trainings, establish a repository of contextualized Grade 1 Self-Learning Modules, integrate the program into the School Improvement Plan (SIP) and Annual Implementation Plan (AIP), allocate financial support through the School MOOE, seek assistance from the Schools Division Office and community stakeholders, and recognize teachers who demonstrate exemplary practices in the effective implementation of Self-Learning Modules.

This proposed Capacity-Building Program serves as the intervention component of the study and directly addresses the identified needs of Grade 1 teachers, thereby promoting continuous improvement in the quality of modular instruction and learner outcomes in the Schools Division of Alaminos City.

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AI DECLARATION STATEMENT

AI-supported tools helped with grammar and structure in creating this article. No AI tools were used to collect, analyze, or interpret data; all authors are credited for their academic contributions.

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