



INSTRUCTION AND SCHOLASTIC ACHIEVEMENT OF GRADE 11 LEARNERS IN ONLINE CLASSES AND PRINTED LEARNING MODALITIES: AN ACTION PLAN

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Email: delmarsoleste78@gmail.com**Abstract**

The shift to alternative learning delivery modalities has required schools to sustain quality instruction despite disruptions to conventional face-to-face education. This study examined the instruction and scholastic achievement of Grade 11 learners enrolled in online classes and printed learning modalities at San Remigio National High School during School Year 2025–2026. Specifically, it assessed the use of instructional strategies, learners' scholastic achievement, differences in learners' and teachers' perceptions, relationships between selected respondent variables and scholastic achievement, and challenges encountered in implementing the two modalities. A quantitative descriptive-correlational design was employed. Respondents comprised 110 participants — 100 Grade 11 learners (50 enrolled in online classes and 50 in the printed learning modality) and 10 teachers, selected through disproportionate stratified random sampling. Data were gathered using a researcher-made, expert-validated questionnaire, while learners' scholastic achievement was determined from official General Weighted Average (GWA) records. Frequency counts, percentages, means, weighted means, an independent-samples t-test, and chi-square tests of independence were used for data analysis at the 0.05 level of significance. Results showed that instructional strategies were highly utilized, with an overall weighted mean of 3.80. No significant difference was found between learners' and teachers' perceptions, $t(108) = -0.91$, $p = .365$. Learners obtained moderate scholastic achievement, with mean GWAs of 87.30 for online classes and 88.12 for printed learning. No



significant associations were found between scholastic achievement and the examined learner or teacher profile variables or instructional strategy utilization. Challenges were experienced at a moderate level ($WM = 3.01$), with unstable internet connectivity emerging as the most prominent concern ($WM = 3.48$). An action plan was developed focusing on instructional improvement, learner support, teacher professional development, resource accessibility, and stakeholder collaboration.

Keywords: *instructional strategies, scholastic achievement, online learning, printed learning modality, flexible learning*



Introduction

Flexible approaches capable of sustaining learning continuity during disruptions to conventional classroom instruction are increasingly necessary for educational systems. Online classes and printed learning modalities offer alternative means of delivering instruction; however, their effectiveness depends on the quality of instructional practices, learner engagement, access to resources, teacher support, and the learning environment. The present study was conducted against the backdrop of disruptions experienced by schools in northern Cebu following a 6.9-magnitude earthquake, which damaged classrooms and necessitated the implementation of alternative learning delivery modalities.

Online and printed learning modalities present distinct opportunities and constraints. Online instruction can facilitate communication, interaction, and access to digital resources, but requires reliable connectivity, appropriate devices, digital competencies, and sustained learner engagement. Printed learning, by contrast, allows continued learning without continuous internet access but demands greater learner independence and can limit immediate teacher feedback. These observations are consistent with the broader literature on flexible learning environments, which similarly identifies recurring concerns such as connectivity problems, limited learning resources, delayed feedback, reduced interaction, and difficulties in independent learning.

The importance of instructional quality is particularly evident in alternative learning environments. Effective instructional strategies include clearly stated learning objectives, organized lessons, appropriate learning activities, meaningful assessments, timely feedback, learner interaction, and adequate academic support. This study is theoretically anchored on self-regulated learning theory, online-collaborative learning theory, and the community of inquiry framework, which together emphasize learner autonomy, collaboration, knowledge construction, and the importance of teaching, social, and cognitive presence in meaningful learning experiences.

Within the Philippine educational context, the necessity of learning continuity and flexible instructional delivery is further underscored by Department of Education (DepEd) policy, including the Basic Education Learning Continuity Plan, the Basic Education Development Plan 2030, guidelines on learning modalities, and the National Learning Recovery Program. These policies highlight the need for responsive instructional approaches and interventions that address learning gaps and strengthen educational resilience.

Despite the substantial body of literature on online and modular learning, contextual evidence remains essential because the effectiveness of instructional strategies can vary based on learners, teachers, resources, and local conditions. At San Remigio National High School, Grade 11 learners experienced both online and printed learning arrangements, providing an opportunity to examine potential differences in instructional practices and learner achievement across these two contexts.

This study therefore examined the instruction and scholastic achievement of Grade 11 learners in online classes and printed learning modalities. Specifically, it sought to: (a) determine the respondents' profiles; (b) assess the utilization of instructional strategies; (c) examine differences between learner and teacher perceptions of instructional strategy utilization; (d) determine learners' scholastic achievement; (e) test relationships between scholastic achievement and selected learner and teacher variables; (f) identify common challenges encountered in the two modalities; and (g) develop an action plan grounded in the findings.



Methods

Research Design

The study employed a quantitative descriptive-correlational research design. The descriptive component characterized the respondents, determined the level of utilization of instructional strategies, described scholastic achievement, and identified challenges encountered in the online and printed learning modalities. The correlational component examined associations between scholastic achievement and selected learner and teacher characteristics and instructional strategy utilization. The design was non-experimental; no instructional variable was manipulated, and data were collected under the existing learning conditions experienced by the participants.

Research Setting and Participants

The study was conducted at San Remigio National High School, in the District of San Remigio, Cebu, during School Year 2025–2026. The senior high school department comprised 1,373 learners, with Grade 11 accounting for 664 learners distributed across 10 modular sections and 7 online sections. A total of 110 respondents participated in the study: 100 Grade 11 learners (50 enrolled in online classes and 50 in the printed learning modality) and 10 teachers. Respondents were selected using disproportionate stratified random sampling, with learning modality serving as the basis for stratification.

Research Instrument

Data were collected through a researcher-made questionnaire developed in accordance with the study's objectives and the reviewed literature. The instrument included sections covering respondent profiles, utilization of instructional strategies, and challenges encountered in the online and printed learning modalities. The questionnaire underwent expert validation and pilot testing to establish clarity, relevance, and reliability. Instructional strategy utilization and challenges were measured using a Likert-type scale, with weighted means interpreted as follows: 4.21–5.00 (Very High), 3.41–4.20 (High), 2.61–3.40 (Moderate), 1.81–2.60 (Low), and 1.00–1.80 (Very Low). Learners' scholastic achievement was determined from their General Weighted Average (GWA) as recorded in official school records, classified as 95–100 (Outstanding), 90–94 (Very Satisfactory), 85–89 (Satisfactory), 80–84 (Satisfactory), and 75–79 (Did Not Meet Expectations).

Data Collection Procedure

Permission to conduct the study was secured from the appropriate school authorities. Following approval, the researchers coordinated with teachers and respondents, finalized the validated questionnaire, and administered the instrument. Respondents were informed of the study's purpose and significance prior to participation. Completed questionnaires were retrieved, organized, coded, tabulated, and prepared for statistical analysis; learners' academic records were likewise consulted to determine GWA. Ethical procedures included voluntary participation, informed consent, confidentiality, and responsible handling of research data, with respondents' identities protected through coding and anonymous identifiers.

Statistical Analysis

Frequency counts and percentages were used to describe the respondents' profiles. Means and percentage distributions summarized scholastic achievement, while weighted means determined the utilization of instructional strategies and the extent of challenges encountered. An independent-samples t-test assessed whether learners and teachers differed significantly in their perceptions of instructional strategies, and chi-square tests of



independence examined associations between scholastic achievement and selected learner profile variables, teacher profile variables, and instructional strategy utilization. All hypotheses were evaluated at the 0.05 level of significance.



Results

Respondent Profile

Among the 100 Grade 11 learners, 93.0% were 17–18 years old, 64.0% were female, and 36.0% were male. The two learning modalities were equally represented, with 50.0% enrolled in online classes and 50.0% in the printed learning modality. Regarding family background, 31.0% of fathers and 33.0% of mothers were college graduates. The largest reported family livelihood category was “others” (36.0%), followed by government employment (23.0%) and business (21.0%). Forty-four percent of learners reported a combined monthly family income below ₱10,000, and 75.0% belonged to households with four to six members. Regarding internet accessibility, 46.0% reported accessible connectivity, 27.0% moderately accessible, 19.0% very accessible, and 8.0% less accessible.

Among the 10 teacher respondents, 60.0% held bachelor's degrees, 30.0% had earned master's degree units, and 10.0% had completed master's degrees. Teachers were equally distributed across English, Filipino, science, mathematics, technology, and livelihood education specializations. Seventy percent had less than five years of teaching experience, and 40.0% had attended three to four relevant seminars or trainings.

Utilization of Instructional Strategies

Instructional strategies were effectively utilized, achieving an overall weighted mean of 3.80 (High). All 20 indicators received a high rating. The highest-rated indicator was the alignment of learning activities with lesson objectives (WM = 4.01), followed closely by the contribution of learning resources to a more profound understanding of lessons (WM = 4.00). The relevance of examples to the lesson and the encouragement of learners to ask questions each received a weighted mean of 3.97, while assessments aligned with lesson objectives yielded a weighted mean of 3.91. These findings suggest that instructional practices were consistently implemented across both modalities, particularly with respect to lesson alignment, learning resources, questioning, assessment, and learner support.

Difference in Learner and Teacher Perceptions

The independent-samples t-test revealed no statistically significant difference between learners' and teachers' perceptions of instructional strategies. Learners recorded a mean perception score of 3.79, while teachers recorded 3.91, $t(108) = -0.91$, $p = .365$. Because the p-value exceeded .05, the null hypothesis was not rejected, indicating that learners and teachers generally shared similar perceptions regarding the implementation of instructional strategies across the online and printed learning modalities.

Scholastic Achievement

Learners in both modalities demonstrated a moderate level of scholastic achievement, as summarized in Table 1.

Table 1. Mean GWA by Learning Modality

Learning Modality	Mean GWA	Interpretation
Online classes	87.30	Moderate



Printed learning modality	88.12	Moderate
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For online classes, 38.0% of learners obtained GWA scores of 90–94, 22.0% obtained 85–89, 18.0% obtained 80–84, 14.0% obtained 75–79, and 8.0% obtained 95–100. For the printed learning modality, 40.0% obtained 90–94, 22.0% obtained 85–89, 18.0% obtained 80–84, and 10.0% each obtained 95–100 and 75–79. Although the printed modality yielded a slightly higher mean GWA (88.12) than online classes (87.30), both groups were classified at the same overall level.

Relationship Between Scholastic Achievement and Study Variables

The chi-square analysis revealed no statistically significant relationship between scholastic achievement and any of the examined learner profile variables, including age, sex, learning modality, father's educational background, mother's educational background, main means of livelihood, combined monthly family income, number of family members, and internet connectivity. For example, learning modality yielded $\chi^2 = 0.470$, $df = 4$, while age yielded $\chi^2 = 3.360$, $df = 8$. Father's educational background yielded $\chi^2 = 19.516$, $df = 24$, and internet connectivity yielded $\chi^2 = 13.832$, $df = 12$; all were interpreted as nonsignificant.

Teacher profile variables likewise showed no significant association with learner achievement, with reported p-values of .803 for educational attainment, .996 for specialization, .880 for teaching experience, and .226 for relevant seminars or trainings. Instructional strategy utilization also showed no significant association with scholastic achievement, $\chi^2 = 6.760$, $df = 4$, $p = .149$.

Challenges Encountered

Respondents experienced a moderate level of challenges overall, with a general weighted mean of 3.01. The most significant challenge reported was unstable internet connectivity (WM = 3.48, High), followed by difficulty managing time and academic requirements (WM = 3.20, Moderate) and difficulty understanding lessons independently (WM = 3.10, Moderate). The remaining challenges, summarized in Table 2, were likewise rated Moderate.

Table 2. Challenges Encountered in Online and Printed Learning Modalities

Challenge	WM	Interpretation
Unstable internet connectivity	3.48	High
Difficulty managing time and academic requirements	3.20	Moderate
Difficulty understanding lessons independently	3.10	Moderate
Limited access to learning materials	3.03	Moderate



Lack of gadgets/devices	2.96	Moderate
Limited teacher–learner communication	2.94	Moderate
Lack of motivation	2.91	Moderate
Financial constraints	2.89	Moderate
Lack of parental support	2.80	Moderate
Delayed module submission/retrieval	2.76	Moderate



Discussion

The findings reveal an important distinction between instructional implementation and measurable scholastic achievement. Although instructional strategies were highly utilized, learners' academic achievement remained at a moderate level, suggesting that the presence and consistent application of instructional strategies alone may not fully explain variation in academic performance.

The high utilization rating of instructional strategies indicates that teachers were generally implementing structured and learner-centered practices. The strongest indicators — alignment of activities with learning objectives, appropriate learning resources, relevant examples, learner questioning, and assessment alignment — are consistent with the literature, which emphasizes clear objectives, structured instructional delivery, learner engagement, assessment, and timely feedback as key components of effective instruction.

The absence of a significant difference between learner and teacher perceptions is particularly notable. Although teachers reported a somewhat higher mean perception score than learners (3.91 versus 3.79), the difference was statistically nonsignificant. This suggests a relatively shared understanding of instructional implementation — not that the two groups experience every aspect of learning identically, but that their overall evaluations of instructional strategies were sufficiently similar to produce no statistically significant difference.

The scholastic achievement findings indicate that both modalities were associated with broadly comparable academic outcomes. Learners in the printed modality had a slightly higher mean GWA than online learners, but both groups remained within the moderate classification. This small difference should not be interpreted as evidence that the printed modality is categorically superior to online learning, particularly given that no significant relationship was established between learning modality and scholastic achievement.

The absence of significant relationships between scholastic achievement and the examined learner and teacher characteristics is likewise noteworthy. Variables such as age, sex, parental educational background, family income, household size, internet accessibility, teacher education, specialization, experience, and training did not demonstrate statistically significant associations with achievement in this sample. These findings support a more holistic understanding of academic performance, suggesting that unexamined factors — including learner motivation, study habits, parental involvement, school support systems, and the broader learning environment — may have contributed more substantially to academic outcomes.

The challenge findings help explain why highly utilized instructional strategies did not translate into markedly higher achievement. Unstable internet connectivity emerged as the most prominent concern; even when instructional design is appropriate, connectivity interruptions can affect attendance, participation, communication, and the completion of academic requirements. Other challenges — including time management, independent learning, resource limitations, communication, motivation, and parental support — suggest that learning outcomes depend on conditions extending well beyond the classroom or the instructional strategy itself. These findings align with the broader literature emphasizing that online and modular learning are shaped by access to resources, digital infrastructure, learner autonomy, parental support, communication, and teacher presence.

From a school-management perspective, these findings imply that improvement efforts should not focus exclusively on increasing the frequency of instructional strategies. Rather, schools should strengthen the support system surrounding instruction — including interventions for learner motivation and self-regulation, improved access to learning resources, strengthened communication mechanisms, teacher professional development, academic monitoring, and collaboration with parents and other stakeholders. These findings provide the empirical basis for the intervention-oriented action plan presented below, which focuses on strengthening learner-centered



and technology-supported instruction, improving learner engagement and independent learning, minimizing connectivity and resource problems, developing teachers' instructional competencies, strengthening stakeholder collaboration, and establishing monitoring and evaluation mechanisms.

Conclusion

Instructional strategies were highly utilized in both online classes and printed learning modalities at San Remigio National High School, and learners and teachers demonstrated similar perceptions regarding their implementation, with no statistically significant difference between their perception scores. Learners in both modalities achieved moderate scholastic achievement, with the printed learning group obtaining a slightly higher mean GWA than the online group. However, no statistically significant relationship was found between scholastic achievement and the learner profile variables, teacher profile variables, or the level of instructional strategy utilization examined.

These findings indicate that effective instructional implementation does not necessarily translate into significantly different levels of scholastic achievement when other contextual factors remain present. The moderate challenges reported by respondents — particularly unstable internet connectivity, time-management difficulties, independent learning demands, limited resources, and learner motivation — underscore the importance of addressing the broader conditions that shape learning. Improving scholastic achievement, therefore, requires a holistic, systems-oriented approach that combines effective instruction with learner support, teacher development, accessible resources, reliable communication, parental involvement, and continuous monitoring, as academic success is influenced by factors that extend well beyond instructional practices alone.

Implications and Recommendations

Based on the findings, the following recommendations are proposed:

- Strengthen learner-centered instruction. Teachers should continue using clearly aligned objectives, relevant examples, interactive activities, formative assessment, and timely feedback.
- Develop learner self-regulation. Schools should provide activities on time management, study skills, independent learning, motivation, and academic planning.
- Address connectivity problems. School administrators and stakeholders should explore mechanisms for improving internet access and providing alternative resources for learners experiencing connectivity difficulties.
- Improve learning-resource accessibility. Printed and digital learning resources should be reviewed for relevance, accessibility, and alignment with learning competencies.
- Strengthen teacher professional development. Learning Action Cell (LAC) sessions, coaching, workshops, and other professional development activities should focus on flexible learning, technology integration, assessment, learner engagement, and differentiated support.
- Enhance parent and stakeholder participation. Parents, local government units, and other stakeholders should be engaged in addressing barriers to participation and academic progress.
- Establish systematic monitoring and evaluation. Schools should periodically monitor learner achievement, engagement, attendance, completion of requirements, and modality-specific challenges to guide timely interventions.



- Conduct broader studies. Future researchers should investigate additional factors such as motivation, study habits, parental involvement, school support, learning environment, and learner self-regulation using larger samples and multiple schools.

Proposed Action Plan

The findings support a one-year action plan implemented through three phases — preparation, capacity building and implementation, and monitoring and evaluation — centered on five priority areas, summarized in Table 3.

Table 3. Proposed Action Plan

Priority Area	Proposed Intervention	Expected Outcome
Instructional quality	LAC sessions, coaching, and sharing of effective learner-centered strategies	Improved instructional delivery
Learner engagement	Study skills, motivation, time management, peer tutoring, and remediation activities	Improved participation and independent learning
Connectivity/resources	Resource mapping, alternative materials, and stakeholder support	Reduced barriers to learning access
Teacher development	Training on technology integration, assessment, flexible learning, and learner support	Enhanced teacher competencies
Monitoring and collaboration	Progress monitoring and parent–stakeholder conferences	More responsive learner support



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