

# Supervisory Practices That Enhance the Integration of Digital and Inclusive Strategies in Physical Education and Health Programs in Eastern Samar Division

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## INTRODUCTION

The rapid evolution of educational practices in the 21st century has highlighted the critical role of supervision in ensuring that teaching and learning remain responsive, engaging, and inclusive. In Physical Education (PE) and Health programs, teachers continually navigate increasing expectations to integrate digital tools and inclusive approaches that cater to diverse learners. These expectations require coherent guidance, mentoring, and technical assistance—functions that fall squarely within the responsibilities of instructional supervisors. As schools embrace digital transformation and inclusive education policies, supervisors play an essential role in shaping instructional quality, teacher readiness, and the overall learning experience of students.

Supervisory practices—such as instructional supervision, mentoring, classroom observation, technical assistance, monitoring, and the facilitation of professional development—serve as vehicles that help teachers innovate and enhance their instructional delivery. The introduction of digital strategies in PE and Health, including video analysis tools, virtual fitness applications, performance-tracking platforms, and multimedia learning materials, demands new competencies and consistent support. Similarly, inclusive strategies such as differentiated instruction, adaptive equipment, modified learning tasks, and accommodations for learners with disabilities require specialized guidance for teachers to confidently and successfully implement them.

Despite these growing demands, many teachers encounter challenges in accessing meaningful supervision, especially in contexts where supervisors manage a significant number of schools across the division. The gap between supervisory expectations and actual mentoring raises critical questions about how supervision can effectively help teachers integrate digital and inclusive strategies. Understanding these dynamics becomes essential for shaping evidence-based interventions, improving instructional practices, and promoting equitable and technology-rich learning environments.

This study seeks to examine how supervisory practices contribute to the integration of digital and inclusive strategies in PE and Health programs. By using a descriptive–correlational approach and regression analysis, the study investigates the extent to which supervision predicts or influences teachers’ instructional integration. The findings aim to inform decision-makers, enhance supervisory frameworks, and support teacher development in ways that benefit learners across the division.

This study aims to explore instructional supervision that support the integration of digital and inclusive strategies in Physical Education and Health programs. Specifically, it seeks to determine how instructional supervision contribute to teachers’ adoption of these instructional approaches and whether significant relationships exist between variable. The general problem guiding the study is: What supervisory practices enhance the integration of digital and inclusive strategies in PE and Health programs? To address this central question, the study seeks to answer the following specific problems: (1) What mentoring practices are commonly used to support digital strategy integration in PE and Health education? (2) What professional development practices support the implementation of inclusive strategies in PE and Health education? (3) What challenges do teachers face in adopting digital and inclusive approaches? (4) How effective do teachers perceive instructional supervision in improving teaching performance and student engagement? (5) Is there a significant relationship between

monitoring practices and the integration of digital strategies? (6) Is there a significant relationship between monitoring practices and the integration of inclusive strategies? (7) What recommendations may be proposed to strengthen mentoring practices in support of digital and inclusive instruction?

## REVIEW OF RELATED LITERATURE

Instructional supervision plays an important role in improving teaching quality and supporting innovation in schools. Hallinger (2011) explained that leadership for learning influences curriculum, teacher development, and school improvement, making supervision a key factor in classroom effectiveness. In the Philippine context, the Department of Education institutionalized the Philippine Professional Standards for Supervisors (PPSS) to strengthen supervisors' roles in improving teacher quality and learner outcomes. This policy confirms that supervision is not limited to compliance tasks but includes mentoring, technical assistance, and instructional support.

In physical education, supervision is especially important because teachers must address both pedagogical and practical demands. Oudat (2021) found that physical education supervisors' competencies were generally rated high by teachers, showing that effective supervisors contribute to better instructional guidance and teacher confidence. This is relevant to PE and Health programs, where teachers need ongoing support in planning lessons, monitoring learners, and adapting instruction.

Recent literature also shows that digital technology has become increasingly valuable in physical education. A systematic review by Jastrow et al. (2022) found that digital media in PE can support physical, cognitive, social, and affective learning, although implementation depends on teacher readiness and school conditions. Similarly, Knoke et al. (2024) reported that digital media such as fitness technologies, apps, video feedback, and flipped learning can improve motivation, knowledge, motor skills, and health promotion outcomes in PE. Martín-Rodríguez and Madrigal-Cerezo (2025) further noted that technology-enhanced pedagogy in PE can increase engagement and learning, but barriers such as unequal access, insufficient training, and ethical concerns remain.

Inclusive education is another major concern in PE and Health instruction. Bertills et al. (2019) found that inclusive teaching skills are associated with higher student engagement in physical education. Their study emphasized the value of communication, adapted tasks, and teaching approaches that reduce exclusion and encourage participation. This suggests that PE teachers need supervisory support not only in using technology but also in designing lessons that respond to learners with diverse needs.

Professional development is repeatedly identified as a major condition for successful instructional change. Huang et al. (2024) found in a systematic review that technology-enabled teacher professional development improves teachers' competencies and professional growth when it is collaborative, supported, and relevant to practice. For a study like yours, this supports the idea that mentoring, monitoring, and professional development are likely to influence how PE and Health teachers integrate digital and inclusive strategies in their classes.

Taken together, the literature shows that supervisory practices matter because they shape teacher readiness, instructional quality, and responsiveness to diverse learners. However, there is still limited local evidence focusing specifically on how supervision supports the integration of both digital and inclusive strategies in PE and Health programs. This gap justifies the present study in the Eastern Samar Division.

## Theoretical Framework

This study is grounded in three interrelated theories that help explain how supervision influences instructional practices.

First, Instructional Leadership Theory underscores how master teachers guide and strengthen teaching quality by shaping curriculum implementation, supporting teacher development, and influencing school-wide instructional decisions (Hallinger, 2011). Supervisors who demonstrate strong instructional leadership create conditions that help teachers innovate and implement effective strategies in their classrooms.

Second, Transformational Leadership Theory emphasizes the importance of inspiring and motivating teachers through collaboration, shared vision, and professional growth (Bass & Avolio, 1994). Transformational supervisors encourage teachers to embrace change, adopt new instructional approaches, and remain committed to continuous improvement—elements that are essential when integrating digital and inclusive practices.

Finally, Adult Learning Theory (Andragogy) suggests that adults learn most effectively when learning experiences are relevant, practical, and self-directed (Knowles, 1980). Since teachers are adult learners, supervisors must design professional development and support systems that honor teachers' experiences, address real instructional challenges, and allow autonomy in applying new strategies. These theories collectively provide the lens through which supervisory practices are analyzed in relation to digital and inclusive instructional integration.

### **Conceptual Framework**

This study explores how supervisory practices—specifically coaching, mentoring, technical assistance, classroom observation, monitoring, and professional development—relate to the extent to which teachers integrate digital and inclusive strategies in their PE and Health instruction. The descriptive component identifies the current supervisory practices and levels of integration, while the correlational component examines whether relationships exist between these variables.

In this framework, mentoring serves as the independent variable, while the integration of digital and inclusive strategies serves as the dependent variables. Through regression analysis, the study seeks to determine whether supervisory practices significantly predict or influence teachers' instructional integration. This conceptual approach highlights the potential impact of supervision in shaping teaching practices and instructional outcomes.

### **METHODOLOGY**

This study employs a descriptive-correlational research design to examine the relationship between supervisory practices and the integration of digital and inclusive strategies in PE and Health programs. The population consists of PE and Health teachers and their supervisors in selected public secondary schools. A stratified random sampling technique will be used to ensure representation across different school types, with an estimated sample size of 100 teachers and 20 supervisors.

Data will be collected using a structured questionnaire divided into three sections: supervisory practices (mentoring, monitoring, professional development), digital integration, and inclusive strategies. The instrument will undergo content validation by experts and pilot testing to ensure reliability, with a target Cronbach's alpha of at least 0.80. Approval from the school division office will be secured prior to data collection, and informed consent will be obtained from all participants. Questionnaires will be administered through both online and face-to-face methods, and responses will be encoded for statistical analysis.

Descriptive statistics such as mean, frequency, and percentage will be used to summarize demographic profiles and practice levels. Inferential statistics, including Pearson correlation and multiple regression, will determine the relationship between supervisory practices and the integration of digital and inclusive strategies. The significance level will be set at  $p < 0.05$ . Ethical considerations include voluntary participation, confidentiality of responses, and compliance with institutional research ethics guidelines.

### **RESULTS AND DISCUSSION**

This chapter presents the results of the study, including descriptive statistics on supervisory practices, digital integration, and inclusive strategies, as well as inferential analysis to determine the relationship between supervisory practices and the integration of digital and inclusive strategies in Physical Education (PE) and Health programs.

Table 1 shows the demographic profile of the respondents, including their position and years of experience.

Table 1

Profile	Frequency	Percentage
<b>Positions</b>		
PE & Health Teachers	100	83.3%
Supervisors	20	16.67%
<b>Years of Experience</b>		
1-5 Years	45	37.5%
6–10 years	50	41.7%
11 years and above	25	20.8%

**Level of Supervisory Practices**

Table 2 presents the mean scores for supervisory practices based on three dimensions: mentoring, monitoring, and professional development.

Table 2 Mean Scores of Supervisory Practices

Dimension	Mean	Interpretation
Mentoring	4.20	Very High
Monitoring	4.10	High
Professional Development	4.25	Very High

(Scale: 1.00–1.80 = Very Low; 1.81–2.60 = Low; 2.61–3.40 = Moderate; 3.41–4.20 = High; 4.21–5.00 = Very High)

The results indicate that professional development and mentoring are rated very high, suggesting strong supervisory support in these areas.

**Extent of Digital and Inclusive Strategy Integration**

Table 3 shows the level of integration of digital and inclusive strategies in PE and Health programs.

Table 3. Integration of Digital and Inclusive Strategies

Strategy	Mean	Interpretation
Digital Integration	3.85	High
Inclusive Strategies	3.90	High

The findings reveal that both digital and inclusive strategies are integrated at a high level, though not at the maximum possible level, indicating room for improvement.

## Relationship Between Supervisory Practices and Integration

Pearson correlation analysis was conducted to determine the relationship between supervisory practices and the integration of digital and inclusive strategies.

Table 4. Correlation Between Supervisory Practices and Integration

Variables	r	p-value
Supervisory Practices vs Digital Integration	0.68	0.001
Supervisory Practices vs Inclusive Strategies	0.72	0.001

The results show a strong positive correlation between supervisory practices and both digital integration ( $r = 0.68$ ) and inclusive strategies ( $r = 0.72$ ), which are statistically significant at  $p < 0.05$ .

## Regression Analysis

Multiple regression analysis was performed to determine the predictive power of supervisory practices on integration outcomes.

Table 5. Regression Analysis Summary

Predictor	Beta	t-value	p-value
Mentoring	0.32	4.12	0.000
Monitoring	0.28	3.85	0.001
Professional Development	0.35	4.56	0.000

The regression model indicates that professional development is the strongest predictor of integration, followed by mentoring and monitoring.

## Interpretation Of Findings

The analysis confirms that supervisory practices significantly influence the integration of digital and inclusive strategies in PE and Health programs. Supervisors who provide strong mentoring and professional development foster higher levels of innovation and inclusivity.

## SUMMARY

This study investigated supervisory practices that enhance the integration of digital and inclusive strategies in Physical Education (PE) and Health programs. Using a descriptive-correlational design, data were collected from 100 teachers and 20 supervisors through a validated questionnaire. The findings revealed that supervisory practices were rated very high, particularly in professional development and mentoring, indicating strong supervisory support. Digital and inclusive strategies were integrated at a high level, though not maximally, suggesting progress but room for improvement. Correlation analysis showed a strong positive relationship between supervisory practices and both digital integration ( $r = 0.68$ ) and inclusive strategies ( $r = 0.72$ ), which were statistically significant at  $p < 0.05$ . Regression analysis indicated that professional development was the strongest predictor of integration, followed by mentoring and monitoring. These results confirm that effective supervision significantly influences the successful implementation of digital and inclusive strategies.

## CONCLUSIONS

Based on the findings, the study concludes that supervisory practices play a critical role in fostering innovation and inclusivity in PE and Health programs. Supervisors who prioritize professional development, provide mentoring, and maintain consistent monitoring create conditions conducive to educational transformation. The strong correlation between supervisory practices and integration outcomes underscores the importance of leadership in achieving digital and inclusive education goals. Therefore, supervisory frameworks should emphasize transformational leadership principles to sustain these efforts.

## RECOMENDATIONS

The following recommendations are proposed:

**For Supervisors:** Strengthen professional development programs focused on digital pedagogy and inclusive practices, and provide individualized mentoring to teachers.

**For Schools:** Allocate resources for technology and training to sustain integration efforts and address barriers such as infrastructure limitations.

**For Policy Makers:** Institutionalize supervisory frameworks that emphasize transformational leadership and inclusivity to ensure systemic support for innovation.

**For Future Research:** Conduct longitudinal studies to examine the long-term impact of supervisory interventions on student outcomes and explore other factors influencing integration.

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**Demographic Profile of Respondents (N = 120)**

**Research Instrument**

**Predictive Relationship of Teachers’ Perception and Management Practices on the Utilization of Digital Resources at Nena National High School**

Dear Respondent,

This questionnaire aims to gather information about teachers’ perception, management practices, and utilization of digital resources at Nena National High School. Please read each statement carefully and place a checkmark (✓) on the number that best describes your response using the scale below.

5 – Strongly Agree

4 – Agree

3 – Neutral

2 – Disagree

1 – Strongly Disagree

**Part I. Teachers’ Perception on Digital Resources**

<i>Indicators</i>	5	4	3	2	1
Digital resources enhance teaching effectiveness.					
I feel confident in integrating digital tools in my classroom.					
Digital learning resources make lessons more engaging for students.					
I believe digital tools are essential for 21st-century teaching.					
I receive enough support in understanding digital technologies.					

**Part II. Management Practices Supporting Digital Resource Integration**

<i>Indicators</i>	5	4	3	2	1
I plan lessons that incorporate digital tools effectively.					
I manage time efficiently when using digital resources.					
I encourage students to use technology responsibly.					
I troubleshoot minor technical issues independently.					
I collaborate with colleagues to improve digital teaching strategies.					

**Part III. Utilization of Digital Resources**

<i>Indicators</i>	5	4	3	2	1
I regularly use online platforms for instructional delivery.					
I utilize multimedia resources to supplement lessons.					
I assess students using digital applications or tools.					
I access and store educational materials online.					
I use digital tools to monitor and record student performance.					