



Teacher Challenges and Self-Efficacy in the Transition from Remote to In-Person Instruction: Evidence from Philippine Elementary Schools

Norol Aina M. Mito-on

Digkilaan Central School, East 1 District, Digkilaan, Iligan City 9200, Philippines

E-mail: norol-aina.mito-on@deped.gov.ph, ORCID ID: <https://orcid.org/0009-0004-6890-4388>

Aniceto B. Naval

Northwestern Mindanao State College of Science and Technology, Tanguib City 7214, Philippines

E-mail: aniceto.naval@nmsc.edu.ph, ORCID ID: <https://orcid.org/0000-0002-7954-4195>

Received 24/05/2025

Revised 25/05/2025

Accepted 01/06/2025

Abstract

Background and Aim: The COVID-19 pandemic forced teachers to transition from traditional face-to-face instruction to remote learning, bringing considerable instructional challenges. With schools returning to in-person classes, teachers must readapt their instructional and classroom management strategies. This study examines the relationship between teachers' instructional challenges and self-efficacy during this transition in Philippine public elementary schools.

Materials and Methods: This cross-sectional quantitative study involved 150 teachers from four central elementary schools in Iligan City, Philippines. Validated questionnaires measured classroom challenges, instructional adjustments, and teacher self-efficacy.

Results: Teachers experienced moderate challenges in classroom management and resource utilization but displayed exemplary instructional adjustments and high self-efficacy. Regression analyses showed that greater instructional challenges significantly predicted lower teaching efficacy ($\beta = -.22, p = .009$), while effective instructional adjustments significantly enhanced teaching efficacy ($\beta = .37, p = .001$).

Conclusion: Supporting teachers through professional development in lesson design and resource integration is crucial during transitions between teaching modalities. These findings underscore the importance of targeted interventions to sustain teaching efficacy and instructional quality in the post-pandemic educational context.

Keywords: Teacher Challenges, Self-efficacy, Instructional Adjustment, In-person Instruction, Philippine Elementary Schools

Introduction

The COVID-19 pandemic precipitated an unprecedented shift in educational modalities worldwide, compelling teachers to transition abruptly from face-to-face to remote learning. In the Philippines, this transformation surfaced long-standing challenges such as unequal access to technology, teacher readiness for digital platforms, and socio-economic disparities among learners (Bautista et al., 2021; Samortin et al., 2022; Chin et al., 2022). Filipino teachers faced increased workloads, rapidly evolving expectations, and pressure to maintain student engagement through unfamiliar digital means (Barrot et al., 2021; Talidong & Toquero, 2020).

As schools reopened for in-person classes, the process of transitioning back to traditional instruction required educators to readjust classroom management strategies, address pandemic-induced learning gaps, and cope with students' varying levels of academic preparedness, behavioral attitude, and emotional well-being (Cahapay & Anoba, 2021; Melguizo et al., 2021; Maboloc, 2022). This return to the classroom has challenged educators' flexibility in classroom instruction, emphasizing the importance of teacher adaptability and highlighting persistent gaps in institutional support and professional development (Candela & Granda, 2023).

Teacher self-efficacy is the belief in one's ability to plan and execute teaching tasks effectively which has been identified as a key factor in enabling successful adaptation to changing modalities and overcoming instructional challenges (Bandura, 1977; Fackler et al., 2021). Recent Philippine studies found that higher self-efficacy among teachers correlates with greater technological integration, instructional flexibility, and resilience during both remote and in-person teaching (Santos, 2023; Cahapay & Anoba, 2021; Cahapay et al., 2021).

However, empirical investigations specifically examining how Filipino teachers manage the transition back to face-to-face instruction, and the impact of such challenges on their self-efficacy, remain limited (Jackaria, 2022; Talledo & Daulong, 2024; Dellomos et al., 2023; Sangco, 2024; Baladjay & Barrios, 2024). While some recent studies have begun to document teachers' experiences





and the immediate challenges encountered during school reopening, predictive quantitative analyses directly linking these challenges to shifts in teacher self-efficacy are not explicitly explored. Addressing this methodological gap is crucial for informing targeted support, policy, and professional development programs in the Philippine context.

This study aims to investigate the challenges encountered by public elementary school teachers in the central districts of one of the highly urbanized city in Northern Mindanao, Philippines during the transition from remote to in-person instruction, and to examine how these challenges relate to their self-efficacy and instructional adjustments. Insights generated can inform context-sensitive interventions to enhance teacher resilience, effectiveness, and overall educational quality in the post-pandemic era.

Objectives

This study investigates the challenges teachers encountered during the transition from remote to in-person instruction, their classroom instructional adjustments, and the impact of these factors on their teaching efficacy in selected central elementary schools in Iligan City, Philippines.

Specifically, the research addresses the following objectives:

1. To determine the extent of challenges teachers faced in terms of classroom management, delivery of instruction, and utilization of learning resources.
2. To assess the level of teachers' instructional adjustments concerning classroom management strategies, lesson design, and instructional material preparation.
3. To analyze how these challenges and instructional adjustments influence the teachers' overall self-efficacy, and propose an appropriate intervention program based on the findings.

Literature Review

Theoretical Background

This study is anchored on foundational theories of classroom management, instructional adaptation, and teacher self-efficacy. B.F. Skinner's (1960) operant conditioning posits that learning is shaped by behavioral responses to stimuli and that motivational rewards, such as praise or recognition, can reinforce positive classroom behavior. William Glasser's (1990) Choice Theory views teachers as classroom managers who foster environments where students' basic needs are met, emphasizing responsibility, self-regulation, and engagement. Alfie Kohn (2006) advocates for intrinsic motivation and cooperation, proposing that learning environments should nurture curiosity and minimize reliance on external rewards or punishment.

John Dewey (1933) emphasized experiential learning, integrating real-world inquiry with classroom activities, and promoting hands-on, reflective engagement. Dewey's ideas are complemented by Jean Piaget's (1956) constructivism, which asserts that learners actively construct knowledge based on experiences, and teachers facilitate this process by providing opportunities for critical thinking and exploration.

Albert Bandura's (1984) social cognitive theory introduced the construct of self-efficacy which is the belief in one's capacity to organize and execute actions required to manage prospective situations. Teachers with higher self-efficacy are more resilient, innovative, and responsive to classroom challenges, especially in times of change (Bandura, 1977; Tschannen-Moran & Hoy, 2001).

Empirical Background

Recent advancements in educational technology theory, such as anchored instruction (Bransford et al., 1990), situated cognition (Brown et al., 1989), and symbol systems theory (Salomon, 1979), put emphasis on the importance of integrating digital resources, authentic learning contexts, and multimedia for diverse learners. Howard Gardner's (1983) multiple intelligences theory and the diffusion of innovation theory (Rogers, 2003) further inform the need for individualized instruction and the adoption of new teaching tools in dynamic environments.

The abrupt transition to remote learning during the COVID-19 pandemic posed significant challenges for educators globally and particularly in the Philippines. Issues such as technological disparities, insufficient digital training, and increased workload were widespread (Bautista et al., 2021; Cabansag, 2022). As Filipino teachers resumed face-to-face instruction, they faced the complex task of





bridging learning gaps, addressing psychosocial needs, and readjusting classroom management and instructional strategies (Alipio & Torres, 2023; Sangco, 2024).

Several Philippine studies have documented teachers' experiences in this post-pandemic transition. Jackaria (2022) identified key challenges among public elementary teachers in Tawi-Tawi Province, the southernmost province of the Philippines under the Bangsamoro Autonomous Region in Muslim Mindanao. This includes health protocol enforcement, student learning gaps, and the need for new instructional strategies. Similarly, Gudelos and Mabitad (2025) reported that Senior High School teachers in Cebu, Philippines experienced heightened stress related to health protocols, pupil behavior, and heavy workloads as in-person classes resumed. Baladjay and Barrios (2024) explored the lived experiences of teachers in Aklan and highlighted the importance of physical and psychological readiness, infrastructure, and differentiated instruction in supporting both student and teacher well-being.

Notably, while these studies document the different challenges of returning to face-to-face classes in the Philippines, few have directly examined their impact on teacher self-efficacy. Dellomos et al. (2023) provided rare quantitative evidence, finding that Filipino elementary teachers reported high levels of self-efficacy and successful adjustment following school reopening. Importantly, the study showed a positive correlation between self-efficacy and adaptive adjustment, suggesting that teachers who adjusted the transition effectively tended to maintain confidence in their instructional abilities.

Despite these advances, the literature reveals a persistent gap on empirical investigations directly linking specific post-pandemic classroom challenges to changes in teacher self-efficacy remain limited in the Philippine context (Jackaria, 2022; Dellomos et al., 2023; Sanggo, 2024). As Sanggo (2024) and Baladjay and Barrios (2024) note, further research is essential to understand how these transitions influence teacher well-being, resilience, and effectiveness.

Hence, these theoretical perspectives and empirical findings framed this study. While prior work has mapped the broad landscape of challenges during the shift back to face-to-face instruction, few studies have systematically investigated how these experiences affect Filipino teachers' self-efficacy and adaptive practices. Addressing this gap is crucial for informing professional development and institutional support in the post-pandemic educational environment.

Conceptual Framework

Grounded in established theories of classroom management, instructional adaptation, and teacher self-efficacy (Bandura, 1986; Glasser, 1998; Dewey, 1959), the conceptual framework of this study illustrates the hypothesized relationships among key variables influencing teaching efficacy in the post-pandemic educational context.

As depicted in Figure 1, the framework positions two main independent variables:

1. Challenges of Teachers in the Conduct of In-Person Delivery which encompassing classroom management, delivery of instruction, and utilization of learning resources; and
2. Classroom Instruction Adjustment which includes classroom management adjustment, lesson design, and preparation of instructional materials.

Both sets of factors are theorized to directly influence teaching efficacy, operationalized as teachers' beliefs in their capacity to manage classroom processes and facilitate effective learning amidst the resumption of in-person instruction.

This model is anchored in Bandura's (1986) social cognitive theory, which posits that individual efficacy beliefs mediate the relationship between environmental demands and adaptive performance. The framework also draws from Dewey's (1959) and Glasser's (1998) emphasis on teacher adaptability and learner-centered instruction, recognizing that successful navigation of classroom challenges and effective adjustment of instructional practices are critical for sustaining high teaching efficacy during periods of educational transition.

The results derived from this framework will inform the development of context-sensitive intervention programs, grounded in empirical data, to support teacher efficacy and instructional quality in Philippine schools.



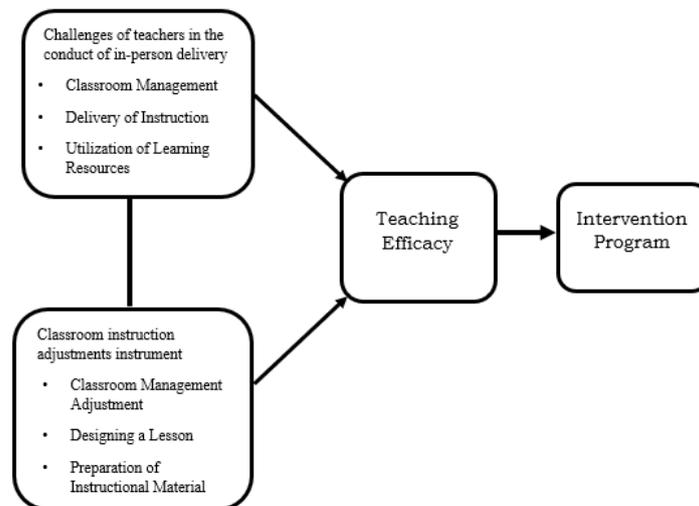


Figure 1. Conceptual Framework illustrating the hypothesized relationships among challenges in in-person delivery, classroom instruction adjustment, and teaching efficacy.

Methodology

This section presents the research methodology employed in the study, including the research design, participants and setting, instruments used, data collection procedures, ethical considerations, and the statistical techniques applied to analyze the data.

1. Research Design

This study utilized a descriptive-correlational research design to systematically gather quantitative data on classroom challenges, instructional adjustments, and teaching efficacy among teachers transitioning from remote (“new normal”) to traditional in-person instruction. This design enabled the assessment of trends and relationships across a representative group of educators.

2. Setting and Respondents

The research was conducted in four central elementary schools in Iligan City, Philippines. These schools in the central district of the Division of Iligan City but limited to City Central Elementary School, Ubaldo Laya Elementary School, Dona Juana Actub Lluch Elementary School, and Villa Verde Elementary School. The target population comprised all teaching staff actively engaged in classroom instruction at these schools. Using a purposive sampling approach, a total of 150 teachers participated, representing a broad cross-section of grade levels and subject specializations.

3. Instrumentation

Data collection employed standardized, self-report questionnaires:

- The Challenges of In-Person Delivery and Classroom Instruction Adjustment instruments were adapted from Hamdag and Coronel (2023), focusing on key areas such as classroom management, instructional delivery, learning resource utilization, management adjustment, lesson design, and instructional material preparation.
- Teaching efficacy was measured using the Teacher Self-Efficacy Scale (TSES) developed by Tschannen-Moran and Hoy (2001), which covers three domains: efficacy for instructional strategies, classroom management, and student engagement.

All items were measured on a 5-point Likert scale (1 = Strongly Disagree, 5 = Strongly Agree). The final tool comprised 40 items on challenges and adjustments, and 12 items on self-efficacy.

4. Scoring Procedure and Interpretation

For each scale, respondents’ scores were computed as means across relevant items. The following qualitative descriptors and interpretations were applied for reporting results:

Challenges of Teachers and Classroom Instruction Adjustments

Rating	Scoring Scale	Qualitative Description	Qualitative Interpretation
5	4.20–5.00	Strongly Agree	Very High
4	3.40–4.19	Agree	High
3	2.60–3.39	Moderately Agree	Moderate
2	1.80–2.59	Disagree	Low
1	1.00–1.79	Strongly Disagree	Very Low

Classroom Instruction Adjustments (Practice Level)

Rating	Scoring Scale	Qualitative Description	Qualitative Interpretation
5	4.20–5.00	Strongly Agree	Exemplary Practice
4	3.40–4.19	Agree	Effective Practice
3	2.60–3.39	Neutral	Developing Practice
2	1.80–2.59	Disagree	Emerging Practice
1	1.00–1.79	Strongly Disagree	Beginning Practice

These interpretive categories provided a consistent framework for classifying the degree of challenges, the quality of classroom adjustment practices, and the levels of teaching efficacy as perceived by the respondents. The scoring and interpretation system facilitated meaningful comparisons and the identification of key areas for intervention in both research reporting and practical application.

5. Validity and Reliability

The adaptation process included expert review for content validity and pilot testing with a subset of teachers. Internal consistency reliability (Cronbach’s alpha) for each subscale exceeded 0.80 in prior validation studies (Hamdag & Coronel, 2023; Tschannen-Moran & Hoy, 2001). In the current sample, Cronbach’s alpha values for all subscales ranged from 0.85 to 0.93, indicating high reliability.

6. Data Gathering Procedure

After securing institutional approvals, the researchers distributed questionnaires in person and electronically, as appropriate. Respondents were provided informed consent forms explaining the study’s purpose, voluntary participation, and confidentiality assurances. Data collection occurred over a four-week period to ensure comprehensive participation and data accuracy.

7. Data Analysis

Survey responses were encoded and analyzed using IBM SPSS Statistics (Version 26). Descriptive statistics which include means and standard deviations were computed to summarize respondents characteristics and the main study variables. Inferential analyses comprised Spearman correlation and linear regression to examine the relationships among classroom challenges, instructional adjustments, and teaching efficacy. Statistical significance was set at $p < 0.05$.

Prior to conducting inferential analyses, an exploratory analysis was performed to assess the assumptions underlying the statistical procedures employed. This included checks for normality, linearity, homoscedasticity, and the presence of outliers. All relevant assumptions were validated, and where necessary, appropriate adjustments (such as the exclusion of residual outliers) were implemented to ensure the robustness of the findings and compliance with statistical criteria.

8. Ethical Considerations

This study adhered to established ethical standards in educational research. Ethical clearance was obtained from the relevant institutional review board. Participation was voluntary, and all respondents provided informed consent. Anonymity and confidentiality were strictly maintained; data were reported in aggregate form and used solely for research purposes.

Results

Results and findings of the study are presented chronologically based on the objectives of the study as presented therein.

Table 1 *Extent of Challenges of the Teachers in the Conduct of In-Person Delivery*

Domain	Min	Max	Mean	SD	Qualitative Interpretation
Classroom Management	1.38	5.00	2.84	.802	Moderate Challenge
Delivery of Instruction	1.00	4.00	2.41	.779	Slight Challenge
Utilization of Learning Resources	1.43	4.57	2.82	.714	Moderate Challenge
Challenges of In-person Delivery (Total)	1.68	4.09	2.71	.648	Moderate Challenge

Table 1 presents the extent of challenges encountered by teachers in the conduct of in-person delivery across three core domains: classroom management, delivery of instruction, and utilization of learning resources. The analysis shows that teachers perceive moderate challenges in both classroom management ($M = 2.84$, $SD = 0.80$) and utilization of learning resources ($M = 2.82$, $SD = 0.71$). By contrast, delivery of instruction is rated as only a slight challenge ($M = 2.41$, $SD = 0.78$). The aggregate mean score for overall challenges of in-person delivery is 2.71 ($SD = 0.65$), indicating a moderate level of challenge.

The range of minimum and maximum scores ($Min = 1.00$, $Max = 5.00$) across domains reflects considerable variability in teachers' individual experiences. Some respondents reported minimal difficulty, while others found particular aspects extremely demanding. Nevertheless, the relatively low standard deviations suggest consistency in teacher perceptions within each domain, with the narrowest spread observed in the overall challenge score.

These findings align with contemporary frameworks in classroom management, which underscore the role of organizational skills, leadership, and pedagogical expertise in navigating classroom challenges (Sabornie & Espelage, 2022; Jackaria, 2022). The moderate difficulty reported in resource utilization resonates with Vygotsky's Sociocultural Theory, highlighting the crucial role of mediating tools and resources in the learning process (Vygotsky, 1980), and is consistent with recent Philippine studies that point to persistent gaps in resource availability and digital literacy as barriers to effective teaching during the transition to in-person instruction (Baladjay & Barrios, 2024).

Notably, the relatively low challenge level associated with instructional delivery suggests that teachers have developed effective pedagogical strategies and adapted well to instructional demands. This finding echoed in Bruner's (1966) Theory of Instruction and supported by empirical evidence that Filipino teachers demonstrate resilience and adaptability in navigating new teaching modalities (Dellomos et al., 2023).

Overall, the data emphasize the need for continued professional development and targeted support, particularly in classroom management and resource integration, to further strengthen teacher efficacy in the post-pandemic educational landscape (Bautista et al., 2021; Baladjay & Barrios, 2024).

Table 2 *Extent of Classroom Instruction Adjustment of the Teachers*

Domain	Min	Max	Mean	SD	Qualitative Interpretation
Classroom Management Adjustment	3.00	5.00	4.32	.464	Exemplary Practice
Designing a Lesson	2.00	5.00	4.36	.654	Exemplary Practice
Preparation of Instructional Material	3.00	5.00	4.28	.536	Exemplary Practice
Classroom Instruction Adjustment (Total)	3.00	5.00	4.31	.468	Exemplary Practice

Table 2 displays the extent of classroom instruction adjustment among teachers across three core domains: classroom management adjustment, lesson design, and preparation of instructional materials. The results demonstrate consistently high levels of adjustment, with mean scores above 4.20 in all areas such as classroom management adjustment ($M = 4.32, SD = 0.46$), designing a lesson ($M = 4.36, SD = 0.65$), and preparation of instructional materials ($M = 4.28, SD = 0.54$). The aggregate mean score for overall classroom instruction adjustment is 4.31 ($SD = 0.47$), which, according to the adopted interpretive scale, is classified as an exemplary practice of classroom instruction adjustment.

The high minimum scores (ranging from 2.00 to 3.00) and narrow standard deviations indicate that teachers' self-reported adjustment practices are not only exemplary on average, but also consistently strong across the respondent group. This suggests a broad and robust capacity among teachers to adapt their classroom management strategies, curriculum design, and resource preparation in the wake of educational disruptions.

These findings are congruent with the theoretical perspective of constructivism (Piaget, 1956; Dewey, 1933) which emphasizes the adaptive, reflective, and learner-centered roles of teachers. They also support the assertion that high teacher self-efficacy and adaptability are central to maintaining instructional quality during educational transitions (Bandura, 1997; Tschannen-Moran & Hoy, 2001).

Empirical evidence from recent Philippine studies corroborates these results. For instance, Dellomos et al. (2023) and Baladjay and Barrios (2024) documented strong adaptive practices and instructional flexibility among teachers during the resumption of in-person classes, crediting ongoing professional development and institutional support as key enabling factors. Candela and Granda (2023) similarly observed that teachers implemented innovative lesson designs and resource adjustments to address diverse student needs and post-pandemic learning gaps.

Collectively, these outcomes reflect not only the resilience of Filipino teachers but also their commitment to exemplary professional practice, even amidst ongoing educational challenges. The results underscore the importance of sustained professional development, collaborative support systems, and resource provision in further nurturing instructional adaptability in Philippine schools (Bautista et al., 2021).

Table 3 Relationship Between the Teachers' Classroom Instruction Adjustments and Conduct of In-Person Delivery Challenges

Classroom Instruction Adjustments	Conduct of In-Person Delivery Challenges	Correlation Coefficient (<i>rho</i> value)	p-value
Classroom Management Adjustment	Classroom Management	-.254**	.002
	Delivery of Instruction	-.413**	<.001
	Utilization of Learning Resources	-.350**	<.001
Designing a Lesson	Classroom Management	-.345**	<.001
	Delivery of Instruction	-.380**	<.001
	Utilization of Learning Resources	-.440**	<.001
Preparation of Instructional Material	Classroom Management	-.123	.148
	Delivery of Instruction	-.240**	.004
	Utilization of Learning Resources	-.169*	.046
Classroom Instruction Adjustment (Total)	Conduct of In-person Delivery Challenges (Total)	-.428**	<.001

** Correlation is significant at the 0.01 level

* Correlation is significant at the 0.05 level

Table 3 presents the correlation coefficients between teachers' classroom instruction adjustments and the challenges they encounter in in-person delivery across various domains. The results indicate a series of significant negative correlations, suggesting that higher levels of classroom instruction adjustment are associated with lower perceived challenges in the conduct of in-person teaching.

Specifically, Classroom Management Adjustment is significantly and negatively correlated with challenges in classroom management ($\rho = -.254, p = .002$), delivery of instruction ($\rho = -.413, p < .001$), and utilization of learning resources ($\rho = -.350, p < .001$). This finding suggests that teachers who more actively adjust their classroom management strategies tend to perceive fewer obstacles in managing their classrooms, delivering lessons, and integrating resources during in-person instruction. Similar trends are observed for the domain of Designing a Lesson, which is strongly and negatively associated with all three types of delivery challenges, with correlation coefficients ranging from $-.345$ to $-.440$.

The correlation between Preparation of Instructional Material and classroom management challenges is negative but not statistically significant ($\rho = -.123, p = .148$), while significant but weaker negative associations are found with delivery of instruction ($\rho = -.240, p = .004$) and utilization of resources ($\rho = -.169, p = .046$). At the aggregate level, total classroom instruction adjustment is significantly and moderately negatively correlated with overall in-person delivery challenges ($\rho = -.428, p < .001$). This result underscores the central role of adaptive instructional practices in mitigating the practical difficulties teachers face during the transition back to face-to-face teaching.

These findings align with empirical evidence from the Philippines and internationally. For instance, Dellomos et al. (2023) found that Filipino teachers with higher self-reported adjustment abilities exhibited greater resilience and perceived fewer classroom management barriers during school reopening. Similarly, Maboloc (2022) highlighted that effective adaptation particularly in lesson design and classroom strategies was linked to improved confidence and reduced stress among teachers during the limited resumption of face-to-face classes. International research echoes this relationship, with Tschannen-Moran and Hoy (2001) demonstrating that teacher efficacy and adaptive practices are closely linked to successful classroom management and instructional delivery, especially in challenging or rapidly changing educational environments.

Furthermore, these results support Bandura's (1997) theory of self-efficacy, which posits that individuals with stronger efficacy beliefs are more likely to engage in adaptive coping behaviors, thereby reducing the impact of external challenges. Recent Philippine studies, such as Baladjay and Barrios (2024), further emphasize the need for ongoing professional development and instructional support to bolster teachers' adaptive capacities during periods of significant educational transition.

In summary, the data indicate that teachers who actively adjust their classroom management strategies, lesson planning, and preparation of instructional materials are significantly less likely to experience difficulties in the conduct of in-person teaching. This finding supports Bandura's (1997) assertion that adaptive behavior is a critical mechanism by which individuals mitigate stressors and maintain efficacy. The ability to proactively tailor classroom practices not only reduces immediate challenges but also reinforces teachers' confidence and control over instructional processes. This relationship is particularly important in the context of post-pandemic transitions, where variability in student readiness, resource constraints, and pedagogical shifts place high demands on teacher adaptability. Therefore, fostering adaptive expertise through sustained training, reflective practice, and collegial collaboration becomes essential in buffering the effects of structural and instructional disruptions. These results highlighted the need for institutional strategies that prioritize adaptive capacity as a core professional competency among educators.

Table 4 *Level of Teaching Efficacy of the Teachers*

Domain	Min	Max	Mean	SD	Qualitative Interpretation
Motivational Strategies Efficacy	3.00	5.00	4.43	.510	Very High Self-Efficacy
Classroom Management Efficacy	3.00	5.00	4.36	.524	Very High Self-Efficacy
Instructional Strategies Efficacy	3.00	5.00	4.36	.567	Very High Self-Efficacy
Teacher's Efficacy (Total)	3.00	5.00	4.39	.490	Very High Self-Efficacy

Table 4 presents the levels of teaching efficacy among the respondents in all key domains of teacher's efficacy such as motivational strategies, classroom management, and instructional strategies. As presented, results showed that teachers perceived a very high self-efficacy in teaching across all the domains. The highest mean rating score is observed in motivational strategies efficacy ($M = 4.43$, $SD = 0.51$), closely followed by both classroom management efficacy ($M = 4.36$, $SD = 0.52$) and instructional strategies efficacy ($M = 4.36$, $SD = 0.57$). This led to a composite mean rating score for the overall teacher efficacy of 4.39 ($SD = 0.49$), also interpreted as "very high self-efficacy" according to the adopted scoring rubric.

The minimum and maximum scores (3.00 to 5.00 across all domains) indicate that no respondent rated themselves lower than "Agree" on the efficacy scale, reflecting uniformly high confidence levels across the cohort. The relatively low standard deviations suggest strong consensus among teachers regarding their perceived abilities in the post-pandemic context.

These results align with contemporary empirical evidence from the Philippines and broader international contexts. Dellomos et al. (2023) found that Filipino elementary teachers reported very high self-efficacy in the immediate return to face-to-face classes, highlighting resilience and adaptability in motivational, management, and instructional roles. Similarly, Antonio (2023) and Padohinog et al. (2024) reported that self-efficacy was consistently high among Filipino teachers and was positively associated with their capacity to implement instructional adjustments and maintain student engagement. Tschannen-Moran and Hoy (2001), in a seminal international study, underscore the importance of high teacher efficacy for instructional innovation, effective classroom management, and sustained student motivation. These findings consistently reflected in the present data.

International research supports these trends, noting that high levels of teacher efficacy foster greater flexibility, commitment to student success, and openness to professional learning and adaptation (Zee & Koomen, 2016). Within the Philippine context, these findings suggest that teachers are not only equipped to manage the challenges of post-pandemic education but are also positioned to drive positive outcomes in student learning and classroom climate (Dellomos et al., 2023; Abela et al., 2025).

These findings provided a compelling evidence of very high levels of self-efficacy among the respondent teachers, particularly in their use of motivational strategies, classroom management, and instructional techniques. These results emphasize the role of strong efficacy beliefs in supporting teachers' resilience, adaptability, and effectiveness in the dynamic environment of post-pandemic schooling.

Table 5 *Influence of Conduct of In-Person Delivery Challenges to the Teachers' Teaching Efficacy*

Independent Variable	Unstandardized Coefficients		Standardized Coefficients	R ²	p-value
	B	SE	β		
(Constant)	4.837	.175			
Conduct of In-person Delivery Challenges	-.166	.063	-.220	.048	.009**

F(1,139) = 7.024**; SE = Standard Error

**p < 0.01

Table 5 presents the results of the regression analysis examining the influence of in-person delivery challenges on teachers' teaching efficacy. The negative unstandardized coefficient ($B = -0.166$, $SE = 0.063$) indicates that an increase in difficulties associated with delivering instruction in person is significantly associated with a decrease in teachers' self-efficacy ($\beta = -0.220$, $p = .009$). The low R^2 value of .048 suggests that while in-person delivery challenges have a statistically significant impact, they account for only a modest portion (4.8%) of the variance in teaching efficacy. This highlights the complexity of teacher efficacy and suggests that multiple factors contribute to its development and maintenance (Tschannen-Moran & Hoy, 2001).

These findings are consistent with Bronfenbrenner's (1992) ecological systems theory, which emphasizes the multifaceted influence of environmental systems such as classroom climate, institutional support, and community context on individual functioning. The result also reiterates

Bandura's social cognitive theory (1986), which posits that environmental stressors, when unmanaged, can erode self-efficacy beliefs, potentially compromising professional motivation and performance. Further, the results resonate with the stress-strain-coping model (Lazarus & Folkman, 1984), which asserts that unaddressed workplace challenges can diminish efficacy and well-being, and with Tait's (2008) conceptualization of teacher resilience as the capacity to adapt and maintain efficacy in the face of adversity.

Empirical studies in the Philippine context corroborate these findings. Dellomos et al. (2023) found that Filipino teachers experiencing fewer classroom management and resource-related challenges reported higher self-efficacy during the transition to in-person classes. Similarly, Talledo and Daulong (2024) and Tschannen-Moran & Hoy (2001) highlight the inverse relationship between environmental barriers and efficacy beliefs, with effective coping and professional support serving as protective factors. Hence, this result reinforces the critical need for targeted interventions and sustained professional development aimed at helping teachers navigate the evolving challenges of in-person delivery. While teachers generally exhibit high efficacy as shown in Table 4, persistent classroom and resource-related challenges can undermine this strength. The relatively low R^2 further encourages stakeholders to explore additional determinants of teaching efficacy. This includes organizational support, collegial collaboration, personal resilience, and student engagement in order to develop a holistic framework for supporting teacher effectiveness.

Thus, the present findings provide empirical support for the view that in-person delivery challenges negatively influence teaching efficacy, but also highlighted the complex nature of efficacy development. This suggests that educational leaders and policymakers can enhance teachers' capacity to adapt and thrive in a dynamic educational landscape by integrating individual, institutional, and environmental strategies (Dellomos et al., 2023; Malabrigo et al., 2023; Tschannen-Moran & Hoy, 2001; Bronfenbrenner, 1979; Bandura, 1986; Lazarus & Folkman, 1984; Tait, 2008).

Table 6 *Influence of Classroom Instruction Adjustment to the Teachers' Teaching Efficacy*

Independent Variable	Unstandardized Coefficients		Standardized Coefficients	R^2	p-value
	<i>B</i>	<i>SE</i>	β		
(Constant)	2.696	.358			
Classroom Instruction Adjustment	.392	.083	.374	.140	.001**

$F(1,139) = 22.501^{**}$; $SE = Standard Error$

** $p < 0.01$

Table 6 presents the results of a linear regression analysis assessing the influence of classroom instruction adjustment on teachers' teaching efficacy. The analysis reveals that classroom instruction adjustment is a strong, positive, and significant predictor of teaching efficacy ($\beta = 0.374$, $p = .001$). The unstandardized coefficient ($B = 0.392$, $SE = 0.083$) indicates that for each unit increase in classroom instruction adjustment, there is a corresponding 0.392 unit increase in teaching efficacy. The model explains 14% of the variance in teaching efficacy ($R^2 = 0.140$), a notable proportion for a single predictor in social sciences research.

These findings implied the crucial role of teachers' adaptive practices such as revising classroom management approaches, innovating lesson designs, and preparing instructional materials in enhancing their sense of efficacy. This result aligns closely with Bandura's (1997) social cognitive theory, which posits that mastery experiences and adaptive strategies are among the most powerful sources of self-efficacy. Teachers who proactively adapt their instructional methods in response to changing educational demands are more likely to perceive themselves as effective and capable, even in challenging circumstances.

Empirical research supports this dynamic, Tschannen-Moran and Hoy (2001) found that adaptive teaching practices are among the strongest predictors of teacher efficacy, a finding further substantiated by more recent large-scale studies (Zee & Koomen, 2016). Within the Philippine context, Dellomos et al. (2023) and Alipio and Torres (2023) highlighted that Filipino teachers who engaged in



reflective instructional adjustments during the return to face-to-face classes reported higher efficacy and resilience. These findings reinforce the idea that instructional flexibility, continuous professional development, and willingness to innovate are critical levers for maintaining high teacher efficacy during periods of transition.

Furthermore, the strength of the relationship observed in this study ($R^2 = .140$) exceeds that found for in-person delivery challenges as seen in Table 5, suggesting that proactive instructional adjustment may be a more salient driver of efficacy than simply reducing challenges. This aligns with the positive psychology perspective on teacher well-being, which emphasizes building adaptive capacities rather than merely alleviating stressors (Schelvis et al., 2014).

Practical implications include the necessity for educational leaders and policymakers to prioritize ongoing professional development, collaborative learning communities, and institutional support structures that empower teachers to refine and adapt their instructional approaches. This suggests that fostering environments where instructional adjustment is valued and supported, schools can directly enhance teacher efficacy, with downstream benefits for student engagement and learning outcomes.

Hence, the findings affirm that classroom instruction adjustment is a pivotal factor in promoting high levels of teaching efficacy, highlighting the need for systemic efforts to cultivate adaptive expertise among teachers in dynamic educational settings (Bandura, 1997; Tschannen-Moran & Hoy, 2001; Zee & Koomen, 2016; Dellomos et al., 2023).

Discussion

The study's findings revealed several key insights regarding the challenges faced by elementary school teachers transitioning from remote to in-person instruction and how these challenges relate to their self-efficacy and instructional adjustments. Teachers reported moderate difficulties primarily in classroom management and the utilization of learning resources, which aligns with existing literature highlighting persistent resource-related barriers in Philippine schools post-pandemic (Baladjay & Barrios, 2024; Bautista et al., 2021). These challenges likely stem from ongoing infrastructural limitations, insufficient training on effective resource integration, and students' readjustment to structured learning environments after prolonged remote instruction.

Conversely, teachers demonstrated exemplary adjustments in instructional practices, particularly in lesson planning and classroom management strategies. These findings resonate strongly with Piaget's (1956) and Dewey's (1933) constructivist theories, suggesting that teachers effectively leveraged adaptive, student-centered strategies to accommodate new learning environments. This high adaptability underscores their resilience and aligns with recent Philippine studies, which noted similar effective adaptations during educational transitions (Dellomos et al., 2023; Candela & Granda, 2023). Importantly, teachers who actively adjusted their instructional strategies perceived significantly fewer instructional and classroom management challenges. This finding supports Bronfenbrenner's (1979) ecological systems theory, suggesting that proactive adaptations within classroom contexts effectively mitigate external pressures. It also aligns with Bandura's (1997) self-efficacy theory, highlighting mastery experiences such as successfully adapting instructional strategies as critical to maintaining teacher confidence and competence.

Further analysis showed that increased instructional challenges negatively influenced teacher self-efficacy, albeit modestly. This aligns with Lazarus and Folkman's (1984) stress-strain-coping model, indicating that unmanaged environmental stressors can negatively affect efficacy beliefs. However, the moderate impact suggests other factors (e.g., institutional support, collegial collaboration) also play critical roles in sustaining high levels of efficacy among teachers. In contrast, effective instructional adjustments significantly and positively influenced teacher self-efficacy, reinforcing the importance of professional development programs that enhance teachers' adaptive capacities (Tschannen-Moran & Hoy, 2001; Dellomos et al., 2023).

Practically, these findings imply the need for targeted professional development and institutional support systems focusing on classroom management and resource utilization to enhance instructional effectiveness and sustain teacher resilience. Educational leaders and policymakers should





therefore prioritize interventions designed to strengthen teachers' adaptive instructional capacities, ensuring their ongoing efficacy and effectiveness amid continued educational transitions.

Extent and Nature of Classroom Challenges and Instructional Adjustment

Teachers reported moderate levels of challenge in classroom management and resource utilization, suggesting that despite overall confidence, substantial barriers persisted in the post-pandemic teaching environment. This aligns with existing evidence from Philippine studies, indicating persistent infrastructural and managerial obstacles as schools reopened after prolonged remote learning (Baladjay & Barrios, 2024). However, teachers reported relatively fewer difficulties with direct instructional delivery, possibly reflecting professional resilience, adaptability, and prior experience with differentiated and innovative teaching strategies (Dellomos et al., 2023).

Simultaneously, teachers exhibited exemplary levels of instructional adjustment, consistently adapting classroom management practices, lesson planning, and instructional resource preparation. These adaptations, strongly reflective of Piaget's (1980) and Dewey's (1959) constructivist theories, underscore teachers' ability to facilitate learning through active engagement, innovation, and responsiveness to contextual demands.

Relationship Between Instructional Adjustment and Teaching Efficacy

An important finding was the significant negative correlation between classroom instruction adjustment and perceived challenges. Teachers who were more proactive and adaptive in their instructional practices reported fewer classroom management and instructional delivery problems. This result resonates strongly with Bronfenbrenner's ecological systems theory (1979), emphasizing how proactive adjustments within immediate environments (microsystems such as classrooms) can mitigate external stressors. Similarly, Bandura's (1997) self-efficacy framework highlights that mastery experiences such as successfully adapting instructional strategies are vital to enhancing teachers' perceived capabilities and effectiveness.

Impact of In-Person Delivery Challenges on Teaching Efficacy

Regression analysis revealed that in-person delivery challenges negatively predicted teaching efficacy, albeit modestly (4.8% of variance explained). This suggests that while such challenges undeniably influence teacher confidence, their impact is relatively limited, aligning with the stress-strain-coping model (Lazarus & Folkman, 1984). Teachers' capacity to cope with stressors, supported by institutional mechanisms or personal resilience, can buffer negative impacts on their perceived efficacy (Tait, 2008). Educational systems should, therefore, not merely focus on eliminating challenges but also emphasize building coping strategies and resilience among teachers.

The Strong Influence of Instructional Adjustment on Teacher Efficacy

Notably, classroom instruction adjustment emerged as a strong predictor of teaching efficacy, explaining 14% of the variance. This finding is particularly compelling, supporting Bandura's (1997) contention that successful adaptation in challenging situations directly contributes to higher self-efficacy. Recent international research corroborates this, demonstrating that adaptive teaching behaviors strongly predict teacher well-being, efficacy, and student outcomes (Zee & Koomen, 2016; Schelvis et al., 2014). Within the Philippine context, Dellomos et al. (2023) and Antonio (2023) similarly emphasized how adaptive instructional strategies directly enhance teacher resilience and professional effectiveness during educational transitions.

This strong relationship has crucial implications for professional development programs and institutional policies. It emphasizes that professional development focusing explicitly on instructional flexibility, differentiated learning strategies, and adaptive classroom management should be prioritized. Institutional policies must proactively provide support structures that enable teachers to continuously develop their adaptive capacities and foster collaborative environments that enhance collective efficacy.

Synthesis and Implications for Policy and Practice

Collectively, these findings highlight two essential pathways for enhancing teaching efficacy amidst educational transitions:

1. **Reducing Environmental Challenges:** School leaders should address structural challenges such as classroom management support, resource allocation, and digital literacy training. While these





factors explain only a moderate portion of efficacy variance, mitigating such stressors is necessary to sustain high-quality teaching environments.

2. **Enhancing Instructional Adjustment Capacities:** More importantly, stakeholders must recognize and actively develop teachers' adaptive capacities through systematic professional learning initiatives. Adaptive expertise and instructional responsiveness significantly bolster teaching efficacy, improving not only teacher resilience but also student learning outcomes (Tschannen-Moran & Hoy, 2001).

The combination of these strategies aligns closely with recent Philippine educational research emphasizing the importance of resilience, adaptive practices, and robust professional support in maintaining high-quality education amid ongoing challenges (Baladjay & Barrios, 2024; Dellomos et al., 2023).

Limitations and Directions for Future Research

Despite its insights, this study has limitations that open avenues for future inquiry. The modest explained variance in teaching efficacy highlights that additional unmeasured factors such as organizational support, emotional well-being, or personal resilience could significantly influence teacher efficacy. Future research might explore these additional variables through qualitative studies, longitudinal designs, or mixed-method approaches.

Moreover, this study's cross-sectional nature limits causal interpretations. Longitudinal studies tracking teacher efficacy, instructional adaptation, and perceived challenges over extended periods could clarify these relationships further, providing stronger implications for sustained institutional support and intervention strategies.

Conclusion

This study addressed the need to understand how teachers manage classroom challenges during the critical transition from remote to in-person instruction following the COVID-19 pandemic. The findings indicate that teachers encountered moderate challenges in classroom management and resource utilization but effectively adapted their instructional practices, maintaining high levels of teaching efficacy. Instructional adjustments significantly enhanced teaching efficacy, while persistent instructional challenges had a modest negative impact.

Given these results, educational leaders and policymakers should prioritize targeted professional development focusing on classroom management, lesson design, and resource integration to further bolster teachers' efficacy. Continuous institutional support and intervention programs tailored to these specific areas will be essential to sustain teacher resilience and ensure high-quality instruction amid future educational transitions.

Knowledge Contribution

The conceptual model presented in the Figure 2 encapsulates the key theoretical and practical contributions of this study, magnifying how classroom challenges, instructional adjustments, and teaching efficacy are interconnected during the transition from remote to face-to-face instruction, specifically within the post-pandemic educational landscape.



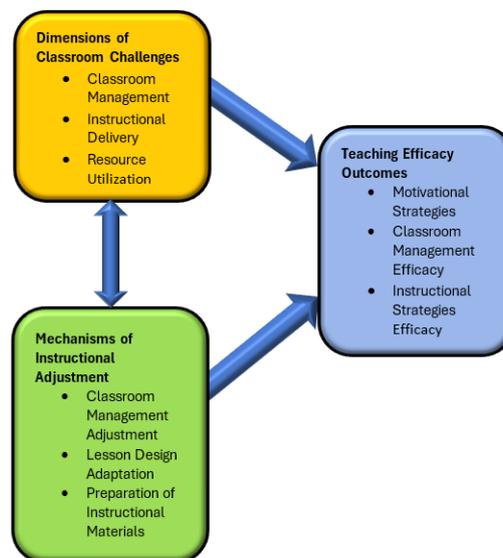


Figure 2. Conceptual Model of the Relationship Among Classroom Challenges, Instructional Adjustment Mechanisms, and Teaching Efficacy Outcomes during the Transition to In-Person Instruction.

This study contributes to existing knowledge by highlighting the critical role of instructional adjustment mechanisms specifically classroom management adaptation, innovative lesson design, and proactive preparation of instructional materials in effectively addressing classroom-related challenges (e.g., student behavior and resource constraints) during the transition from remote to face-to-face instruction. Drawing from Bandura’s (1997) social cognitive theory and Bronfenbrenner’s (1979) ecological systems theory, the findings emphasize that teachers who proactively adjust their instructional strategies significantly enhance their teaching efficacy, fostering positive classroom outcomes. This insight emphasizes the necessity for targeted professional development and institutional support that empower teachers’ adaptive capabilities and resilience, ultimately facilitating effective classroom management, improved student engagement, and sustained teacher confidence in evolving educational environments.

Recommendation

Based on the findings, several targeted recommendations are proposed for educational practitioners, policymakers, and future researchers. Educational institutions should prioritize structured professional development programs focused explicitly on enhancing teachers’ adaptive instructional strategies, classroom management skills, and effective integration of instructional resources. Schools should also strengthen support systems including peer collaboration and mentorship programs to bolster teachers’ resilience and capacity to navigate ongoing challenges associated with the return to face-to-face instruction. Policymakers are advised to ensure equitable access to necessary instructional resources, funding, and infrastructure, reducing structural barriers that teachers face. Finally, future research should explore longitudinal studies to monitor the sustained impact of adaptive instructional practices on teacher efficacy and investigate additional influencing factors such as emotional well-being, institutional support, and community collaboration to provide a more comprehensive understanding of teacher effectiveness in post-pandemic educational environments.

References

- Abela, R., Manaig, M., & Mamolo, L. (2025). *Self-efficacy and learning experiences of preservice teachers in a state university*. *Journal of Curriculum and Teaching*, 14(1), 163. <https://doi.org/10.5430/jct.v14n1p163>
- Alipio, M., & Torres, R. (2023). *Transition to limited face-to-face classes during the COVID-19 pandemic: Challenges met and lessons learned towards implementing continuous quality improvement*. *IMCC Journal of Science*, 3, 15–29. <https://ejournals.ph/IMCC/Vol.+3+No.+1+2023/Articles/Article3.pdf>



- Antonio, G. C. (2023). *Resilience and sense of self-efficacy among Filipino educators during the 2019 coronavirus pandemic. American Journal of IR 4.0 and Beyond*, 2(1), 1–5.
<https://doi.org/10.54536/ajirb.v2i1.1457>
- Baladjay, R., & Barrios, R. (2024). *Lived experiences of teachers on the full implementation of in-person classes. Industry and Academic Research Review*, 5(1), 152–158.
<https://doi.org/10.53378/iarr.924.114>
- Bandura, A. (1977). *Social foundations of thought and action: A social cognitive theory*. Prentice-Hall.
- Bandura, A. (1984). Recycling misconceptions of perceived self-efficacy. *Cognitive Therapy and Research*, 8(3), 231–255. <https://doi.org/10.1007/BF01172995>
- Bandura, A. (1984). Recycling misconceptions of perceived self-efficacy. *Cognitive Therapy and Research*, 8(3), 231–255. <https://doi.org/10.1007/BF01172995>
- Bandura, A. (1986). *Social foundations of thought and action: A social cognitive theory*. Prentice-Hall.
- Bandura, A. (1997). *Self-efficacy: The exercise of control*. W.H. Freeman.
- Barrot, J. S., Llenares, I. I., & del Rosario, L. S. (2021). Students' online learning challenges during the pandemic and how they cope with them: The case of the Philippines. *Education and Information Technologies*, 26, 7321–7338. <https://doi.org/10.1007/s10639-021-10589-x>
- Bautista, A. P., Bleza, D. G., Buhain, C. B., & Balibrea, D. M. (2021). School support received and the challenges encountered in distance learning education by Filipino teachers during the COVID-19 pandemic. *International Journal of Learning, Teaching and Educational Research*, 20(6), 360–385. <https://doi.org/10.26803/IJLTER.20.6.19>
- Bransford, J. D., Sherwood, R. D., Hasselbring, T. S., Kinzer, C. K., & Williams, S. M. (1990). Anchored instruction: Why we need it and how technology can help. In *Cognition, education, and multimedia* (pp. 27–67).
- Bronfenbrenner, U. (1979). *The ecology of human development: Experiments by nature and design*. Harvard University Press.
- Bronfenbrenner, U. (1992). *Ecological systems theory*. Sage Publications.
- Brown, J. S., Collins, A., & Duguid, P. (1989). Situated cognition and the culture of learning. *Educational Researcher*, 18(1), 32–42.
- Bruner, J. S. (1966). *Toward a theory of instruction*. Harvard University Press.
- Cabansag, J. N. (2022). Lived experiences of higher education institution students in online learning classes in the new normal. *World Journal of English Language*, 12(7), 265–275.
<https://doi.org/10.5430/wjel.v12n7p265>
- Cahapay, M. B., & Anoba, J. L. D. (2021). Technological pedagogical knowledge self-efficacy and continuance intention of Philippine teachers in remote education amid COVID-19 crisis. *Journal of Pedagogical Research*, 5(3), 68–79. <https://doi.org/10.33902/JPR.2021370614>
- Cahapay, M. B., Carreon, T., Garcia, K., Rotas, E., Amador, R., & Anoba, J. L. (2021). Psychometric properties of remote teaching efficacy scale in employed Filipino teachers during COVID-19 crisis. *Journal of Digital Educational Technology*, 2(1), ep2202.
<https://doi.org/10.21601/jdet/11435>
- Candela, G. A. V., & Granda, G. K. A. (2023). Lived experiences of teachers in the transition from face-to-face to virtual class during the COVID-19 pandemic. *Ciencia Latina Revista Científica Multidisciplinar*, 7(5), 9865–9886. https://doi.org/10.37811/cl_rcm.v7i5.8552
- Chin, J. M.-C., et al. (2022). Perspectives on the barriers to and needs of teachers' professional development in the Philippines during COVID-19. *Sustainability*, 14(1), 470.
<https://doi.org/10.3390/su14010470>
- Dellomos, C. O., et al. (2023). Levels of self-efficacy and adjustment among Filipino elementary teachers in the re-opening of face-to-face classes. *International Research Journal of Science, Technology, Education, and Management*, 3(4), 166–179.
<https://doi.org/10.5281/ZENODO.10516518>
- Dewey, J. (1933). *How we think: A restatement of the relation of reflective thinking to the educative process*. D.C. Heath and Company.
- Dewey, J. (1959). *Dewey on education: Selections*. Bureau of Publications, Teachers College, Columbia University.
- Fackler, S., Malmberg, L. E., & Sammons, P. (2021). An international perspective on teacher self-efficacy: Personal, structural and environmental factors. *Teaching and Teacher Education*, 99, 103255. <https://doi.org/10.1016/j.tate.2020.103255>
- Gardner, H. (1983). *Frames of mind: The theory of multiple intelligences*. Basic Books.
- Glasser, W. (1990). *The quality school: Managing students without coercion*. Harper & Row.





- Glasser, W. (1998). *Choice theory in the classroom*. HarperCollins.
- Gudelos, J. T., & Mabitad, B. D. (2025). Work-related stress, workloads, and performance: A case of senior high school teachers. *International Journal of Research and Innovation in Social Science*, IX(I), 1457–1471. <https://doi.org/10.47772/IJRISS.2025.9010121>
- Hamdag, A. K., & Coronel, L. M. (2023). *Classroom instruction adjustments of teachers in the conduct of in-person learning delivery*. St. Michael's College of Iligan.
- Jackaria, P. M. (2022). Elementary teachers' experiences and instructional challenges during the return to school after the COVID-19 closure in the Philippines. *International Research Journal of Science, Technology, Education, and Management*, 2(2), 216–225. <https://doi.org/10.5281/zenodo.6955920>
- Kohn, A. (2006). *The homework myth: Why our kids get too much of a bad thing*. Da Capo Press.
- Lazarus, R. S., & Folkman, S. (1984). *Stress, appraisal, and coping*. Springer.
- Maboloc, C. R. (2022). A strategy for school reopening in the Philippines: Lessons from other countries. *Journal of Public Health*, 44(4), 648–649. <https://doi.org/10.1093/pubmed/fdab374>
- Malabrigo, M. S. C., et al. (2023). *In-service training needs of teachers in the new normal*. APHERJ, 11(1), 33–45.
- Melguizo, T., et al. (2021). Expanding student success: The impact of a comprehensive college transition program. *Journal of Research on Educational Effectiveness*, 14(4), 835–860. <https://doi.org/10.1080/19345747.2021.1917029>
- Padohinog, E., Liwanag, B., & Balsicas, N. (2024). Teacher self-efficacy through achievement goals, instructional strategies, and student engagement in the Philippine setting. *Asia Pacific Higher Education Research Journal*, 11(1), 1–17. <https://doi.org/10.56278/apherj.v11i1.2618>
- Piaget, J. (1956). *The construction of reality in the child*. Basic Books.
- Piaget, J. (1980). *Adaptation and intelligence: Organic selection and phenocopy*. University of Chicago Press.
- Rogers, E. M. (2003). *Diffusion of innovations* (5th ed.). Free Press.
- Salomon, G. (1979). Media and symbol systems as related to cognition and learning. *Journal of Educational Psychology*, 71(2), 131–148. <https://doi.org/10.1037/0022-0663.71.2.131>
- Samortin, M., et al. (2022). Education and the pandemic: Examining students' remote learning experiences in the Philippines. *Uluslararası Eğitim Araştırmacıları Dergisi*, 5(1), 1–13. <https://doi.org/10.52134/ueader.1064312>
- Sangco, S. M. O. (2024). Elementary teachers' experiences and instructional challenges: Return to school after the COVID-19 closure. *International Journal of Advanced Multidisciplinary Studies*, 4(5), 164–176.
- Santos, M. A. (2023). Effects of flexible learning training on teachers' self-efficacy and technology integration. *International Multidisciplinary Research Journal*, 5(3), 51–58. <https://doi.org/10.54476/ioer-imrj/534612>
- Schelvis, R. M. C., et al. (2014). Exploring teacher and school resilience. *Teachers and Teaching: Theory and Practice*, 20(5), 622–637. <https://doi.org/10.1080/13540602.2014.937962>
- Skinner, B. F. (1960). *The behavior of organisms: An experimental analysis*. Appleton-Century-Crofts.
- Tait, M. (2008). Resilience as a contributor to novice teacher success. *Teacher Education Quarterly*, 35(4), 57–75.
- Talidong, K. J. B., & Toquero, C. M. D. (2020). Philippine teachers' practices to deal with anxiety amid COVID-19. *Journal of Loss and Trauma*, 25(6–7), 573–579. <https://doi.org/10.1080/15325024.2020.1759225>
- Talledo, A. C., & Daulong, J. T. (2024). Difficulties of teachers during the transition to face-to-face classes. *GEO Academic Journal*, 5(1). <https://doi.org/10.56738/issn29603986.geo2024.5.81>
- Tschannen-Moran, M., & Hoy, A. W. (2001). Teacher efficacy: Capturing an elusive construct. *Teaching and Teacher Education*, 17(7), 783–805. [https://doi.org/10.1016/S0742-051X\(01\)00036-1](https://doi.org/10.1016/S0742-051X(01)00036-1)
- Vygotsky, L. S. (1980). *Mind in society: The development of higher psychological processes*. Harvard University Press.
- Zee, M., & Koomen, H. M. Y. (2016). Teacher self-efficacy and its effects on classroom processes, student academic adjustment, and teacher well-being. *Review of Educational Research*, 86(4), 981–1015. <https://doi.org/10.3102/0034654315626801>

