
INSTRUCTIONAL LEADERSHIP OF SCHOOL HEADS AND TEACHERS' TEACHING EFFECTIVENESS: A QUANTITATIVE INVESTIGATION IN COTABATO PROVINCE

^{*1}Chayrale John C. Generale, ²Ahsan E. Lansao, EdD

¹DepEd - Cotabato Division - Bangbang Elementary School.

²Graduate School, Cotabato Foundation College of Science and Technology, Dorohuman,
Arakan, Cotabato.

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*Corresponding Author: Chayrale John C. Generale

DepEd - Cotabato Division - Bangbang Elementary School.

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2. ABSTRACT

This quantitative study examined the level of school heads' instructional leadership and its relationship to and influence on teachers' teaching effectiveness in selected DepEd Central Elementary Schools in Mlang, Tulunan, and Matalam, Cotabato during School Year 2025–2026. Using a descriptive-correlational design with a validated survey instrument, data were gathered from 300 teacher-respondents through complete enumeration. School heads' instructional leadership was assessed across four dimensions: instructional supervision (M=4.58, Strongly Agree), coaching (M=4.52, Strongly Agree), mentoring (M=4.50, Strongly Agree), and collaboration and teamwork (M=4.58, Strongly Agree). Teachers' teaching effectiveness was assessed across five dimensions: classroom management (M=4.52, Highly Effective), student learning outcomes (M=4.45, Highly Effective), knowledge of content (M=4.57, Highly Effective), delivery (M=4.61, Highly Effective), and assessment (M=4.59, Highly Effective). Spearman's Rho revealed highly significant positive correlations between all instructional leadership and teaching effectiveness dimensions ($p=0.000$). Multiple linear regression confirmed that coaching and collaboration and teamwork significantly predicted classroom management; coaching, mentoring, and collaboration significantly predicted student learning outcomes and knowledge of content; mentoring, supervision, and collaboration significantly predicted delivery and assessment — with coaching showing a statistically significant negative effect on assessment. Both null hypotheses are rejected. Findings affirm that instructional leadership is a critical predictor of

teacher professional effectiveness, with mentoring and coaching emerging as the most consistent and powerful leadership mechanisms.

3. KEYWORDS: *Instructional leadership, teaching effectiveness, school heads, Spearman rho, regression analysis, Cotabato, mentoring, coaching.*

4. INTRODUCTION

School head instructional leadership — encompassing systematic supervision, individualized coaching and mentoring, and collaborative professional development — is among the most well-evidenced predictors of teacher professional effectiveness and student achievement. When principals invest substantively in these practices, they create the institutional conditions within which teachers can grow continuously, students learn more effectively, and schools improve measurably. Conversely, when principals disengage from instructional leadership, absorbed by administrative obligations, professional development becomes episodic and classroom practice risks stagnation (Collier-Reed, 2019).

In the Philippine context, evidence reveals a significant gap between the recognized importance of instructional leadership and its consistent practice. Arcilla (2019) found that barely 38% of surveyed teachers reported meaningful engagement with school heads around instructional matters — a figure that reflects both the structural demands of school headship and the insufficient institutional support for instructional leadership activities. This study addressed this gap by quantitatively examining instructional leadership levels, measuring teacher effectiveness, and determining the statistical relationships and predictive influences between these variables in the Cotabato Province context.

The study is anchored in Bass's (1999) Transformational Leadership Theory, which centers on leaders' capacity to inspire, develop, and orient individuals toward shared institutional goals — a theoretical framework particularly applicable to Philippine elementary schools facing changing student demographics and increasing accountability demands.

5. MATERIALS AND METHODS

Research Design

This study employed a descriptive-correlational research design as Phase 1 of a larger mixed-methods investigation, describing levels of instructional leadership and teaching effectiveness and examining their statistical relationships and predictive patterns.

Locale and Participants

The study was conducted in ten (10) DepEd Central Elementary Schools across Tulanang (Tulanang Central ES, Sibib Central ES, La Esperanza Integrated School), Mlang (Mlang Pilot ES, Bagontapay Central ES, Nueva Vida Central ES, Lika Central ES), and Matalam (Matalam Central ES, Linao Central ES, Taguranao Central ES) during School Year 2025–2026. All 300 teachers from these schools served as respondents through complete enumeration.

Instrument

An adopted and validated survey questionnaire measured school heads' instructional leadership across four dimensions (supervision, coaching, mentoring, collaboration and teamwork) using a 5-point Likert scale (1=Strongly Disagree to 5=Strongly Agree), and teachers' teaching effectiveness across five dimensions (classroom management, student learning outcomes, knowledge of content, delivery, assessment) using a 5-point scale (1=Least Effective to 5=Highly Effective). Content validity was established through expert panel review; reliability was confirmed through Cronbach's Alpha.

Statistical Analysis

Weighted mean described the levels of instructional leadership and teaching effectiveness. Spearman's Rho assessed significant relationships between leadership and effectiveness dimensions (ordinal Likert data). Multiple linear regression identified the significant predictors of each teaching effectiveness dimension from the four leadership dimensions.

6. RESULTS AND DISCUSSION

School Heads' Instructional Leadership

Table 1. Summary of School Heads' Instructional Leadership by Dimension.

Instructional Leadership Dimension	Weighted Mean	Description
Instructional Supervision	4.58	Strongly Agree
Coaching	4.52	Strongly Agree
Mentoring	4.50	Strongly Agree
Collaboration and Teamwork	4.58	Strongly Agree

All four instructional leadership dimensions were rated Strongly Agree by teacher-respondents. Instructional supervision and collaboration and teamwork registered the highest ratings (M=4.58 each), reflecting particularly strong performance in purposeful supervision

goal-setting, clear expectation communication, and collaborative decision-making processes. Hallinger (2019) affirmed that effective instructional leaders share decision-making authority as a deliberate strategy for building professional investment.

Table 2. Instructional Supervision — Detailed Item Ratings.

Statement	Mean	Description
Provides clear and specific goals for instructional supervision	4.70	Strongly Agree
Effectively communicates expectations for teachers' effectiveness	4.62	Strongly Agree
Helps teachers identify areas for improvement in teaching	4.61	Strongly Agree
Encourages open communication and exchange of ideas	4.62	Strongly Agree
Provides necessary support and resources for instructional enhancement	4.39	Strongly Agree
Considers and respects teachers' opinions in decision-making	4.52	Strongly Agree
Weighted Mean	4.58	Strongly Agree

Supervisory goal clarity received the highest item score ($M=4.70$), consistent with Bossert's (2019) finding that clear supervisory goals help teachers align their practice with performance benchmarks. Resource provision received the lowest rating ($M=4.39$), reflecting structural constraints documented in the qualitative strand. Coaching ($M=4.52$) reflected strong personalized support; mentoring ($M=4.50$) demonstrated principled, reflective professional guidance; and collaboration ($M=4.58$) captured the embedded culture of shared professional engagement that characterizes effective instructional leadership.

Teachers' Teaching Effectiveness

Table 3. Summary of Teachers' Teaching Effectiveness by Dimension.

Teaching Effectiveness Dimension	Weighted Mean	Description
Classroom Management	4.52	Highly Effective
Student Learning Outcomes	4.45	Highly Effective
Knowledge of Content	4.57	Highly Effective
Delivery	4.61	Highly Effective
Assessment	4.59	Highly Effective

All five teaching effectiveness dimensions were rated Highly Effective. Instructional delivery received the highest rating (M=4.61), with clarity of lesson objectives (M=4.71) as the highest individual item across all effectiveness indicators. Assessment (M=4.59) and content knowledge (M=4.57) followed closely. Student learning outcomes obtained the lowest rating (M=4.45) though still within the Highly Effective range, reflecting the complexity of translating instructional quality into measurable learning gains.

Table 4. Delivery — Detailed Item Ratings (.Highest Effectiveness Dimension)

Statement	Mean	Description
Clearly explains lesson objectives and ensures they are understood	4.71	Highly Effective
Adapts teaching strategies to cater to different learning needs	4.62	Highly Effective
Effectively uses examples and real-life applications	4.63	Highly Effective
Maintains appropriate pace ensuring all students can keep up	4.57	Highly Effective
Demonstrates strong communication skills for lesson clarity	4.51	Highly Effective
Weighted Mean	4.61	Highly Effective

Relationship Between Instructional Leadership and Teaching Effectiveness

Table 5. Spearman Rho Correlation Matrix: Instructional Leadership and Teaching Effectiveness.

Instructional Leadership Dimension	Classroom Mgmt. (r)	Student Learning (r)	Knowledge of Content (r)	Delivery (r)	Assessment (r)
Instructional Supervision	0.508**	0.539**	0.527**	0.649**	0.612**
Coaching	0.635**	0.708**	0.610**	0.579**	0.554**
Mentoring	0.604**	0.716**	0.645**	0.711**	0.678**
Collaboration & Teamwork	0.629**	0.674**	0.661**	0.640**	0.648**

**Correlation is significant at the 0.01 level (p=0.000 for all cells).

All 20 correlations in the matrix were highly significant (p=0.000). Mentoring demonstrated the strongest overall correlation profile, peaking with student learning outcomes (r=0.716) and delivery (r=0.711). Coaching showed the strongest single correlation with student learning outcomes (r=0.708) and classroom management (r=0.635). Collaboration and teamwork demonstrated the most uniform profile (r=0.629–0.674), confirming that

collaborative practices generate broad-spectrum effectiveness gains. Both null hypotheses of no significant relationship are rejected.

Influence of Instructional Leadership on Teaching Effectiveness

Table 6. Regression Results Summary: Instructional Leadership Predicting Teaching Effectiveness.

Dependent Variable	Significant Predictors	t-value	R ²	F	p-value
Classroom Management	Coaching (t=4.969**) Collaboration & Teamwork (t=3.729**)	4.969 / 3.729	0.213	7.043	0.000**
Student Learning Outcomes	Coaching (t=5.635**) Mentoring (t=2.978**) Collaboration & Teamwork (t=4.424**)	5.635 / 2.978 / 4.424	0.602	111.818	0.000**
Knowledge of Content	Collaboration & Teamwork (t=4.297**) Mentoring (t=3.390**) Coaching (t=2.881**)	4.297 / 3.390 / 2.881	0.569	97.609	0.000**
Delivery	Mentoring (t=7.314**) Supervision (t=4.803**) Collaboration & Teamwork (t=3.351**)	7.314 / 4.803 / 3.351	0.647	135.801	0.000**
Assessment	Mentoring (t=6.069**) Collaboration & Teamwork (t=5.017**) Supervision (t=3.330**) Coaching (t=-1.960*)	6.069 / 5.017 / 3.330 / -1.960	0.609	115.168	0.000**

The regression models explained substantial proportions of variance across all five teaching effectiveness dimensions: 21.3% for classroom management, 60.2% for student learning outcomes, 56.9% for content knowledge, 64.7% for delivery, and 60.9% for assessment. Mentoring emerged as the dominant predictor of delivery (t=7.314**) and assessment (t=6.069**), affirming Choi's (2020) finding that continuous professional mentoring is the most powerful mechanism for developing sophisticated instructional competencies.

The significant negative effect of coaching on assessment (t=-1.960*, p=0.050) is the study's most notable anomalous finding, suggesting that current coaching protocols are not aligned with assessment improvement. As Mandinach and Jackson (2020) argued, assessment leadership requires specific data literacy and formative strategy investment that may not be embedded in current coaching approaches.

7. CONCLUSION

This quantitative study provides compelling evidence that school heads' instructional leadership significantly predicts teachers' teaching effectiveness across all five assessed dimensions. School heads in Cotabato Province demonstrate high instructional leadership, and teachers demonstrate high teaching effectiveness — with statistically significant and practically meaningful relationships between these two sets of variables. Mentoring and coaching emerged as the most powerful and consistent predictors of teacher professional performance, with collaboration and teamwork providing broad-spectrum effectiveness gains. The negative coaching effect on assessment represents an important finding that requires targeted intervention through assessment-focused coaching redesign.

Both null hypotheses are rejected: significant relationships and significant influences were confirmed. The study recommends: institutionalizing protected time for instructional leadership activities; redesigning coaching protocols to incorporate assessment literacy; strengthening collaborative PLCs as a content knowledge development mechanism; and advocating for resource provision aligned with instructional leadership requirements.

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