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A Model of Instructional Leadership among Public School Administrators in Cotabato Province

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ABSTRACT

This study investigated the dimensions and practices of instructional leadership among public school administrators in the Division of Cotabato, employing a mixed-methods approach that integrated Exploratory Factor Analysis (EFA), Confirmatory Factor Analysis (CFA), and Thematic Analysis. The quantitative phase involved the administration of a structured survey to public school administrators, yielding a Kaiser-Meyer-Olkin (KMO) value of .946 and a significant Bartlett's Test of Sphericity (χ^2 = 12088.483, p < .001), confirming the dataset's suitability for factor analysis. EFA revealed six core dimensions of instructional leadership—namely: Provide Incentives for Teachers, Promote Professional Development, Framing the Goals, Professional Growth and Support, Teacher Recognition and Development, and Collaborative and Ongoing Professional Development—explaining 69.462% of the total variance. A refined five-factor model using CFA demonstrated a stronger model fit (CFI = .907; RMSEA = .076), supporting its use as a more parsimonious representation of leadership behaviors. Structural modeling confirmed significant interrelationships among the constructs, particularly between incentives, professional development, and collaboration. Thematic analysis of qualitative interview data further identified strategic practices such as instructional alignment, mentoring, monitoring and evaluation, and collaborative engagement as key drivers of effective leadership. Administrators also emphasized the need for balancing instructional and managerial responsibilities while making data-informed decisions aligned with national standards. Findings suggest that instructional leadership in Cotabato is a multidimensional construct, shaped by strategic actions and systemic support. The validated model provides a robust framework for enhancing leadership development, professional growth, and educational outcomes in public school settings.

INTRODUCTION

The quality of education in any region is significantly influenced by the leadership styles and practices of its educators. In the context of Cotabato Province, the effectiveness of instructional leadership among public school teachers plays a crucial role in shaping student outcomes and overall school performance. Instructional leadership, which focuses on the core responsibilities of improving teaching and learning, is essential in driving educational reforms and navigating an environment conducive to academic excellence.

Research has consistently shown that effective instructional leadership involves a range of practices, including setting clear educational goals, managing curriculum and instruction, indicates professional development, and creating a supportive school climate (Cox & Mullen, 2023; Noor & Nawab, 2022). However, the implementation of these practices can vary significantly based on local contexts (Arombo, 2023; Shaked, 2023). Therefore, it is imperative to examine how public-school administrators in Cotabato Province perceive and enact instructional leadership and to identify the key factors that contribute to their effectiveness in this role.

Moreover, a similar study indicated that time management and self-efficacy showed a moderate effect on instructional leadership (Liu & Hallinger, 2018). However, factors such as defines the school mission, manages instructional program, and develops learning climate were significantly fit with the model of instructional leadership as found out from the study by Al-Mahdy et al. (2018). In the Philippines, framing the goals, supervise and evaluate instructions, provide incentives for teachers, and promote professional development were instructional leadership factors which fit the model for public school administrators (Fernandez & Tagadiad, 2024). However, all of which did not mention the context of the school administrators in the Province of Cotabato.

This study aims to develop a comprehensive model of instructional leadership among public school administrators in Cotabato Province. Exploring the underlying factors on leadership practices, the research seeks to provide valuable insights that can inform policy and practice at both the local and national levels. Through the phases, the study will gather quantitative data to measure the prevalence and impact of different leadership practices, as well as qualitative data to capture the nuanced experiences and perspectives of school administrators.

Statement of the Problem

This mixed method employing the sequential explanatory aims to provide specific answers to the following research questions:

Phase 1: Instructional Leadership Practices, Perceptions, and Decision- Making of Public-School Administrators in Cotabato Province

1. What are the key practices and strategies employed by public school administrators in Cotabato Province to promote instructional leadership?

2. How do public school administrators in Cotabato Province perceive their role in improving student learning outcomes through instructional leadership?

3. What influences the decision-making process of public-school administrators in Cotabato Province when it comes to instructional leadership and curriculum development?

Phase 2: Dimensions and a Model of Instructional Leadership for School Administrators

1. What are the dimensions of instructional leadership for school administrators of Cotabato Division?

2. What model on instructional leadership for school administrators can be developed based on the results?

Phase 3: Dissemination Plan Based on Study Findings

1. What dissemination plan can be proposed based on the findings of the study?

METHODOLOGY

This chapter indicates the methods used, the locale, the instrument, the data analysis, and the ethical considerations.

Research Design

A sequential explanatory research design will be used in this study. A mixed methods research approach that involves collecting qualitative data first, then quantitative data (Skinner & Dancis, 2020). The goal is to explore a topic before collecting quantitative data, and to use the qualitative findings to guide the quantitative data collection (Toyon, 2021).

In this study, the researcher will first explore the instructional leadership among the school administrators. Using different statistical tools, a model will be drawn. Likewise, Phase 2 of the study will use the descriptive qualitative pertaining to the experiences of the school administrators in the context of instructional leadership.

Participants/Respondents of the Study

The participants of the study will be the elementary school administrators in the 3 congressional districts in Cotabato Division and Kidapawan City Division of the Province of Cotabato.

Phase 1

Congressional Districts	Participants
CD 1	5
CD 2	5
CD 3	5
Kidapawan City Division	5
Total	20

In Focus Groups: A Practical Guide for Applied Research (Krueger & Casey, 2015), the authors highlight that the purpose of focus group discussions (FGDs) is not to generalize findings to a broader population but to gain depth and insight into participants' perspectives.

Phase 2

The respondents of the study will be the elementary school administrators in the 3 congressional districts in Cotabato Division of the Province of Cotabato.

Congressional District	Population	Sample Size
CD 1	510	100.07
CD 2	549	107.73
CD 3	582	114.20
Total	1,641	322

Research Instrument

Phase 1

In this phase of the study, the researcher will use the interview guide. This is made up of questions which are essential for understanding the phenomenon as experienced by the school administrators toward their instructional leadership.

Phase 2

A thorough review of the related literature will be carried out by the researcher in order to determine the dimensions suited to the contexts of the school administrators of the Division of Cotabato relative to instructional leadership. They will rate their level of responses using the Likert scale.

Data Analysis

The following statistical tools will be used in the analysis of the data:

Thematic Analysis. A systematic way to analyze qualitative data by identifying and organizing themes. It aims to discover significant themes from a data set that may contain multiple sources (Terry & Hayfield, 2020).

Exploratory Factor Analysis. It is a statistical technique used in the field of multivariate statistics to uncover the underlying structure of a relatively large set of variables. It is often used when researchers do not have a priori hypotheses about the structure or number of factors within a set of variables. EFA helps in identifying the underlying relationships between measured variables and can be used to reduce data by grouping variables into factors based on their correlations (Howard, 2023).

KMO-Bartlett's Test. These are used to evaluate data and determine if it's suitable for factor analysis (Kabit et al., 2020).

Confirmatory Factor Analysis. Confirmatory Factor Analysis (CFA) is a statistical technique used to test whether a hypothesized factor structure fits the observed data. The researcher specifies the number of factors and which variables (indicators) load on each factor. This is based on theoretical considerations or prior empirical findings. A visual representation of the model, showing factors (latent variables) and their relationships with observed variables (indicators). Arrows indicate the direction of influence, with factors influencing observed variables (Brauer et al., 2023).

RESULTS AND DISCUSSIONS

Dimensions of instructional leadership among the public-school administrators in Cotabato Province

Provide Incentives for Teachers. This factor reflects how strategic incentives can drive teaching improvement and motivation. The strongest item (.823) highlighted that availability of incentives boosts teacher motivation, while the presence of healthy competition and collaboration (.805), along with incentives aligned with student outcomes (.763), contributes to a culture of excellence. These findings emphasize that when schools recognize and reward high performance—through both tangible and intangible incentives—they are more likely to sustain quality teaching and long-term engagement.

Promote Professional Development. Professional development is not only about opportunities but about continuous support. The highest loading item in this factor (.834) refers to coaching as a post-training reinforcement, while mentoring (.727) and reflection (.707) were also emphasized. This suggests that professional growth is maximized when administrators guide teachers beyond workshops and into actual classroom application through personalized and collaborative efforts. It moves PD from theory into practice, ensuring lasting impact.

Framing the Goals. This dimension centers on the alignment and communication of instructional goals. Strong loadings were recorded for teacher involvement in goal setting (.751), alignment with the school's vision (.705), and clarity in communication about implementation (.732). These statements affirm that when teachers are part of defining SMART goals, and leadership communicates clearly, it enhances ownership and drives shared responsibility for learning outcomes.

Professional Growth and Support. Administrators play a critical role in building teacher competence through structured observation and evaluation. Feedback aimed at instructional improvement (.757), constructive guidance (.751), and alignment with evaluation criteria (.610) surfaced as strong components. This shows that effective classroom observations—when rooted in growth and aligned with instructional goals—lead to practical support and meaningful teacher development.

Teacher Recognition and Development. Recognition goes beyond rewards. Items like public recognition (.672), non-financial incentives (.544), and personalized feedback (.591) show that teachers value acknowledgment of effort and achievement. Observations used to inform development and targeted planning time incentives support continuous improvement. When recognition is paired with actionable feedback, it fosters a professional culture where excellence is both encouraged and sustained.

Collaborative and Ongoing Professional Development. This factor highlights access, collaboration, and responsiveness to teachers' unique needs. Individualized PD (.655), financial support for external training (.599), and leadership encouragement for continuous learning (.623) were notable. Opportunities for team-based learning and peer observation foster a learning community where teachers grow not just individually, but collectively. This underlines the importance of flexibility and relevance in PD design and delivery.

Dimensions of instructional leadership among the public-school administrators in Cotabato Province

Item	Item Statement	Score	Construct

20	The school offers additional professional development opportunities as an incentive for teachers who demonstrate exceptional teaching practices.	.446	Provide Incentives for Teachers
22	The school offers career advancement incentives, such as promotions or access to specialized roles, to high-performing teachers.	.636	
23	The incentives offered align with the goals of improving teaching quality and student achievement.	.763	
24	The availability of incentives motivates teachers to improve their teaching practices.	.823	
25	The availability of incentives encourages healthy competition and collaboration among teachers.	.805	
26	The incentive program promotes a positive and motivating school culture.	.786	
27	The incentive program reinforces the school's commitment to continuous improvement and excellence in teaching.	.768	
28	Teachers are provided with a variety of professional development opportunities to enhance their teaching skills.	.613	
29	The school administration supports teachers in attending external professional development events, conferences, and workshops.	.568	
30	Professional development activities are scheduled at times that are convenient for teachers and minimize disruption to instructional time.	.509	
35	Teachers receive ongoing support from school leadership following professional development activities.	.439	Promote Professional Development
36	School administrators guide teachers to improving their skills.	.437	
37	School administrators provide opportunities for teachers to share what they have learned from professional development with their colleagues.	.573	
38	Teachers are given time to collaborate with colleagues and implement what they have learned from professional development activities.	.745	
39	The school leadership ensures that there is adequate follow-up on how teachers are applying the skills and knowledge gained from professional development.	.779	
40	Teachers have opportunities to reflect on and discuss their professional development experiences with their peers.	.707	
41	Administrators offer coaching to help teachers apply new strategies in their classrooms.	.834	
42	Administrators provide mentoring to teachers to improve their teaching skills.	.727	
43	Professional development is treated as a continuous process, rather than a one-time event.	.698	
1	The instructional goals of our school are clearly defined and communicated to all.	.574	Framing the Goals
2	The instructional goals are aligned with the school's overall vision and mission.	.705	
3	The instructional goals are regularly reviewed and updated to reflect changes in educational standards and student needs.	.719	
4	Teachers are involved in the process of framing and setting instructional goals for the school.	.751	
5	The instructional goals are specific, measurable, achievable, relevant, and time-bound (SMART).	.750	

6	There is clear communication between school leadership and teachers about how the instructional goals will be achieved.	.732	
7	Our instructional goals support the improvement of student learning outcomes.	.677	
8	The frequency of classroom observations is sufficient to provide meaningful feedback to teachers.	.460	
9	Observations are conducted consistently and fairly across all teachers in the school.	.490	
10	The feedback provided after observations is specific and actionable for teachers.	.437	Professional Growth and Support
11	The evaluation criteria used to assess teaching effectiveness are clearly defined and communicated to teachers.	.610	
12	The evaluation process aligns with the school's instructional goals and priorities.	.603	
13	Teacher evaluations are based on a comprehensive assessment of classroom instruction, including student engagement, lesson planning, and assessment practices.	.652	
14	Feedback from classroom observations is constructive.	.751	
15	Classroom observations aim to improve instructional practices.	.757	
16	Teachers are given time to reflect on and discuss the feedback received during evaluations.	.584	
17	Administrators make recommendations for professional development based on the evaluation results.	.492	
18	The feedback process is designed to help teachers set personal and professional goals for improvement.	.407	
29	The school administration supports teachers in attending external professional development events, conferences, and workshops.	.423	
30	Professional development activities are scheduled at times that are convenient for teachers and minimize disruption to instructional time.	.480	
8	The frequency of classroom observations is sufficient to provide meaningful feedback to teachers.	.544	Teacher Recognition and Development
9	Observations are conducted consistently and fairly across all teachers in the school.	.425	
10	The feedback provided after observations is specific and actionable for teachers.	.419	
16	Teachers are given time to reflect on and discuss the feedback received during evaluations.	.407	
17	Administrators make recommendations for professional development based on the evaluation results.	.507	
18	The feedback process is designed to help teachers set personal and professional goals for improvement.	.591	
19	Teachers are recognized for their achievements through non-financial incentives, such as public recognition or awards.	.672	
20	The school offers additional professional development opportunities as an incentive for teachers who demonstrate exceptional teaching practices.	.612	
21	Teachers are given additional planning time or other time-related incentives for exceptional performance.	.544	

22	The school offers career advancement incentives, such as promotions or access to specialized roles, to high-performing teachers.	.405	
31	The school offers opportunities for teachers to engage in collaborative professional development, such as team-based workshops or peer observations.	.529	Collaborative and Ongoing Professional Development
32	Teachers have access to online professional development resources and courses.	.624	
33	The school provides financial support or funding for teachers to pursue professional development outside of the school (e.g., workshops, certifications, degrees).	.599	
34	The administration encourages teachers to pursue individualized professional development based on their unique teaching needs and career goals.	.655	
35	Teachers receive ongoing support from school leadership following professional development activities.	.623	
36	School administrators guide teachers to improving their skills.	.593	
37	School administrators provide opportunities for teachers to share what they have learned from professional development with their colleagues.	.493	

Fit Indices of Six-Factor Model of instructional leadership among the public-school administrators in Cotabato Province

The six-factor model of instructional leadership among public school administrators in Cotabato Province yielded the following model fit indices: CMIN = 3.375, CFI = 0.841, TLI = 0.821, NFI = 0.790, RMSEA = 0.086, and AIC = 2854.259. The Comparative Fit Index (CFI) and Tucker-Lewis Index (TLI), though slightly below the commonly accepted threshold of 0.90, suggest an acceptable model fit. The Normed Fit Index (NFI) is near the minimum cutoff for adequacy, while the RMSEA value of 0.086 is marginally higher than the desirable threshold of 0.08. The AIC indicates the model's relative parsimony in comparison to other possible configurations.

These results indicate that the six-factor structure is a reasonably appropriate representation of instructional leadership in the given context, though it may benefit from further refinement. While the fit is not excellent, it is sufficient for interpretive and practical use, especially in assessing and enhancing leadership practices. The relatively   strong values imply that the proposed dimensions—such as setting goals, fostering professional development, and recognizing teacher efforts—are statistically supported and relevant to the leadership framework in Cotabato's public schools.

Fit Indices of Six-Factor Model of instructional leadership among the public-school administrators in Cotabato Province

Fit Indices	Obtained Value
CMIN	3.375
Comparative Fit Index (CFI)	.841
Tucker-Lewis Index (TLI)	.821
Normed Fit Index (NFI)	.790
Root Mean Square Error of Approximation (RMSEA)	.086
Akaike Information Criterion (AIC)	2854.259

Six-Factor Model of instructional leadership among the public-school administrators in Cotabato Province

The structural relationships in the model reveal that Provide Incentives for Teachers (F1) positively influences Professional Development (F2), Teacher Recognition and Development (F5), and Collaborative and Ongoing Professional Development (F6), indicating that motivation enhances teacher engagement and growth. Similarly, Framing the Goals (F3) contributes to F2, F5, and F6, suggesting that clearly defined instructional goals drive developmental efforts and collaborative practices. Professional Growth and Support (F4) also influences the same three factors, underlining its foundational role in enabling teacher capacity and connection. Notably, F5 has a strong effect on F6, demonstrating that recognizing and developing teachers fosters greater collaboration. Finally, F2 directly impacts F6, confirming that structured professional development activities naturally evolve into sustained, team-based professional learning.

The model shows that Factor 1 Provide Incentives for Teachers (VAR23 to VAR30) highlights the role of motivation in teacher performance and commitment. Statements 24 through 27 highlight how the presence of incentives fosters improved teaching practices, collaboration among peers, and a school-wide culture of motivation. For example, the idea that "availability of incentives motivates teachers to improve their teaching practices" (Item 24) and "encourages healthy competition and collaboration" (Item 25) supports the view that rewards do more than acknowledge effort—they promote a

proactive, engaged teaching force. Incentive structures that align with a school's goals (Item 27) send a message that the institution values innovation, diligence, and student success.

Factor 2, Promoting Professional Development, captures the strategic efforts of school administrators to foster a culture of continuous learning and instructional improvement through application, reflection, mentoring, and sustained engagement. Items 39 to 43 illustrate that effective Professional Development extends beyond organizing events; it includes structured follow-ups (Item 39) to ensure new knowledge is applied in the classroom, and opportunities for peer reflection (Item 40) to deepen understanding. Coaching and mentoring (Items 41 and 42) provide essential personalized support, helping teachers implement strategies with confidence. Finally, Item 43 underscores the importance of viewing professional development as an ongoing process, reflecting the administrator's commitment to cultivating a growth-oriented and dynamic teaching environment.

In the same vein, Factor 3, Framing the Goals, pertains to the strategic formulation, alignment, and communication of instructional goals within the school system. Items 1 to 7 highlight the importance of clarity, coherence with the school's vision, and responsiveness to changing educational standards. The inclusion of teachers in the goal-setting process fosters shared ownership, while applying SMART criteria ensures goals are specific, measurable, achievable, relevant, and time-bound. Regular reviews keep the goals aligned with student needs, and strong communication between leadership and teachers guarantees that instructional strategies are effectively understood and implemented—all ultimately aimed at improving student learning outcomes.

At one hand, Factor 4 which is Professional Growth and Support centers on how school administrators use evaluation and feedback processes to enhance teachers' instructional practices and foster their professional development. The statements (Items 10 to 16) emphasize the importance of delivering specific, actionable feedback (Item 10) through clearly defined evaluation criteria (Item 11) that are aligned with the school's instructional goals (Item 12). A comprehensive evaluation approach (Item 13) that includes student engagement, lesson planning, and assessments ensures a holistic view of teaching effectiveness. Additionally, the process is designed to be constructive and developmental (Items 14 and 15), aiming to build capacity rather than simply judge performance. Providing time for teacher reflection and dialogue (Item 16) underscores a growth-oriented culture where evaluations are not endpoints but catalysts for continuous improvement.

On the other hand, Factor 5, Teacher Recognition and Development, focuses on how school administrators acknowledge and support teachers' growth by linking evaluation results to meaningful developmental and motivational opportunities. The statements (Items 17 to 21) illustrate a system where professional development is tailored based on evaluation feedback (Item 17) and where the process helps teachers set clear personal and professional improvement goals (Item 18). Recognition is not limited to financial rewards; it includes non-financial incentives such as public acknowledgment and awards (Item 19), which boost morale and reinforce exemplary performance. Furthermore, administrators offer additional PD opportunities and time-related incentives (Items 20 and 21) to recognize high-performing teachers, signaling a culture that values achievement and actively invests in its teaching force.

Finally, Factor 6 Collaborative and Ongoing Professional Development, highlights the importance of sustained, personalized, and team-based learning experiences facilitated by school leadership. The items (31 to 36) reflect a commitment to providing diverse and accessible development opportunities, such as team workshops and peer observations (Item 31), as well as online resources (Item 32) and financial support for external learning (Item 33). This factor also emphasizes individualized learning paths (Item 34), recognizing that teachers have unique goals and needs. Crucially, it underscores the importance of ongoing administrative support (Items 35 and 36), which ensures that PD does not end with the training itself but is followed by continuous guidance and feedback.

Fit Indices of Five-Factor Model of instructional leadership among the public-school administrators in Cotabato Province

The five-factor model of instructional leadership among public-school administrators in Cotabato Province demonstrated strong model fit indices: CMIN = 2.847, CFI = 0.907, TLI = 0.890, NFI = 0.865, RMSEA = 0.076, and AIC = 1238.987. The Comparative Fit Index (CFI) exceeded the standard threshold of 0.90, indicating a good fit, while the Tucker-Lewis Index (TLI) and Normed Fit Index (NFI) were slightly below but still within an acceptable range. The Root Mean Square Error of Approximation (RMSEA) is below the cutoff of 0.08, supporting the model's adequacy. Additionally, the relatively low AIC value suggests that this model strikes a favorable balance between fit and simplicity compared to more complex alternatives.

These results suggest that the five-factor structure is a reliable and parsimonious representation of instructional leadership practices within the studied context. The indicators demonstrate coherence and statistical adequacy, implying that this model can serve as a practical framework for analyzing leadership strategies in schools. With clear and meaningful constructs, administrators can better understand the components that drive effective leadership—ranging from goal-setting and support for professional growth to recognition and development of teachers.

Fit Indices of Five-Factor Model of instructional leadership among the public-school administrators in Cotabato Province

Fit Indices	Obtained Value
CMIN	2.847
Comparative Fit Index (CFI)	.907
Tucker-Lewis Index (TLI)	.890
Normed Fit Index (NFI)	.865

Root Mean Square Error of Approximation (RMSEA)	.076
Akaike Information Criterion (AIC)	1238.987

Five-Factor Model of instructional leadership among the public-school administrators in Cotabato Province

This revised Structural Equation Model (SEM) diagram presents a streamlined representation of the relationships between latent constructs (F1 to F6) and their observed indicators (VARs), along with the interconnections among the factors. The model provides insights into how instructional leadership variables interact and influence each other in the context of professional development among educators.

The structural equation model illustrates the strength of relationships between latent constructs (F1 to F6) and their corresponding observed variables (VARs), along with the interactions among the constructs themselves. Each factor is clearly defined by a set of observed indicators with strong factor loadings, signifying the reliability and validity of the measurement model. For instance, *F1 – Provide Incentives for Teachers* is well-represented by VAR23–VAR28, with loadings as high as 1.00, indicating that these items are strong reflections of how incentives are perceived and implemented. Similarly, *F2 – Promote Professional Development* (VAR31–VAR34) and *F3 – Framing the Goals* (VAR01–VAR07) show high loadings, affirming that both professional growth and goal alignment are clearly and consistently measured. Other constructs like *F4 – Professional Growth and Support* and *F6 – Collaborative and Ongoing Professional Development* also show uniformly high loadings, which strengthens the credibility of the model and confirms the relevance of the included variables.

In terms of relationships among the constructs, the model highlights that *F1 (Incentives)* has a meaningful influence on *F2 (Professional Development)*, *F4 (Support)*, and *F6 (Collaboration)*, emphasizing that when teachers are motivated through incentives, they are more likely to pursue development opportunities, receive support, and engage in collaborative practices. *F2*, in turn, positively affects *F6*, suggesting that structured PD is a gateway to sustained peer learning and teamwork. Likewise, *F4's* contributions to *F2* and *F6* highlight the foundational role of emotional and professional support in facilitating both individual and collective teacher development. Though *F3 (Framing the Goals)* shows slightly weaker but still positive relationships with other constructs, it reinforces the importance of clarity and alignment in institutional objectives as an underlying support for development activities. Overall, the model demonstrates a systemic approach to instructional leadership, where motivation, structure, clarity, and collaboration are interdependent elements fostering professional growth.

Practices and strategies employed by public school administrators in Cotabato Province to promote instructional leadership

Clear Instructional Alignment. Clear instructional alignment ensures that learning objectives teaching strategies and assessments are directly connected. This clarity helps students understand what is expected of them. It also allows teachers to measure learning more accurately. As a result, student performance and engagement can improve.

Ensuring the daily pursuit of school goals by teachers requires regular monitoring, data-driven accountability, collaborative planning, professional development and open communication to align teaching practices with set objectives. As asserted:

Ensuring daily pursuit of school goals by teachers involves a multi-pronged approach: Regular Monitoring and Feedback, Data-Driven Accountability, Collaborative Planning, Professional Development and Open Communication. This combination of monitoring, feedback, and support ensures that school goals are consistently integrated into daily teaching practices. (Informant 1 RQ1.2 L 7-16)

Administrators ensure the daily pursuit of goals by conducting regular classroom walk-throughs, providing feedback and coaching, fostering collaborative teacher teams, and utilizing digital tools to monitor progress, track data, and enhance communication. As mentioned by an informant:

Administrators ensure daily pursuit of goals by conducting regular classroom walk-through, providing feedback and coaching teachers. They also establish collaborative teacher teams to share best practices, discuss challenges, and align instructional strategies. Furthermore, administrators utilize digital tools and platforms to monitor teacher progress, track student data, and facilitate communication. (Informant 7 RQ1.2 L 96-105)

Clear instructional alignment is essential for effective teaching and learning, as it ensures coherence among curriculum standards, instructional practices, and assessments. Alonzo, Bejano, and Labad (2023) found that while teachers in the Philippines possess knowledge of outcomes-based education (OBE), their assessment practices often do not fully align with OBE principles, highlighting a need for systemic approaches to bridge this gap. Similarly, Banjal, Berame, and Elesio (2025) emphasized the importance of constructive alignment in addressing misalignments between teacher education curricula and licensure examination competencies, advocating for collaborative efforts among educational institutions and regulatory bodies. Furthermore, Aquino (2024) underscored the significance of aligning syllabi, teaching-learning activities, and assessments to enhance student performance in higher education mathematics courses. These studies collectively underscore the critical role of clear instructional alignment in promoting educational effectiveness and student achievement.

Professional Development and Mentoring. Professional development and mentoring help teachers improve their instructional skills and stay updated with current practices. Regular mentoring builds teacher confidence and supports professional growth. It also promotes stronger classroom management and student engagement. School leaders should prioritize continuous training to improve teaching quality.

Mentoring improves teacher effectiveness by offering direction, assistance, and practical approaches to enhance lesson delivery. As stated by an informant:

Mentoring would be an effective tool in enhancing teacher's effectiveness in lesson delivery. (Informant 1 RQ1.1 L 47-49)

Teachers align their instructional practices with leadership goals through structured training, supervision, collaboration, and a culture of continuous improvement supported by data-driven decision-making and innovation to enhance teaching effectiveness and ensure student success. As claimed:

We ensure teachers align their instructional practices with leadership goals through training, supervision, and collaboration. The school conducts regular capacity-building programs, classroom observations, and mentoring to enhance teaching effectiveness. By fostering a culture of continuous improvement, data-driven decision-making, and innovation, they ensure quality education and student success. (Informant 13 RQ1.1 L 165-175)

Professional development and mentoring are pivotal in enhancing teacher effectiveness, as evidenced by recent studies. A meta-analysis by Zhang et al. (2024) revealed that workplace mentorship positively impacts teachers' professional development across various disciplines, with individualized mentoring showing significant benefits. Similarly, Cornelius et al. (2020) demonstrated that specialized professional development and coaching for mentors led to improved instructional practices among novice special educators. Furthermore, Pesina (2025) highlighted the transformative potential of digital mentoring platforms in providing scalable and data-driven support, enhancing traditional mentoring practices. These findings underscore the critical role of structured mentoring and continuous professional development in fostering teacher growth and improving educational outcomes.

Monitoring and Evaluation. Monitoring and evaluation (M&E) plays a critical role in assessing program effectiveness. It helps identify strengths and weaknesses to improve outcomes. By tracking progress, M&E ensures that resources are used efficiently and objectives are met. This process also promotes accountability and supports data-driven decision-making.

To ensure teachers consistently work towards school goals, it is essential to implement weekly Team Meetings, Lesson Plan Reviews, Classroom Observations, Data-Driven Discussions, and Collaborative Planning Time for ongoing support and accountability. As mentioned:

To ensure teachers actively pursue school goals daily, there should be weekly Team Meetings, Lesson Plan Reviews, Classroom Observations, Data-Driven Discussions, and Collaborative Planning Time. (Informant 2 RQ1.2 L 27-32)

To ensure teachers align their instructional practices with school goals, Instructional Supervision, Technical Assistance, and Monitoring & Evaluation should be conducted regularly for ongoing guidance and improvement. As mentioned:

To ensure that all teachers understood & align their instructional practices with their goals through conduct of Instructional Supervision, Giving technical Assistance, Monitoring & Evaluation. (Informant 8 RQ1.1 L 106-110)

Monitoring and evaluation (M&E) systems are essential for enhancing teacher effectiveness and improving educational outcomes. A study by Mehmood et al. (2021) in Pakistan demonstrated that M&E frameworks significantly contributed to the continuous professional development of secondary school teachers, aligning their practices with national standards and leading to improved performance. Similarly, Khatete (2020) found that the Teacher Performance Appraisal and Development (TPAD) system in Kenya positively influenced teacher punctuality and adherence to deadlines, thereby enhancing overall teaching quality. Furthermore, Agustina et al. (2023) highlighted that implementing M&E systems in Indonesian elementary schools led to better teaching quality, increased student achievement, and more effective resource management. These studies underscore the critical role of M&E in fostering accountability and continuous improvement in educational settings.

Collaborative Engagement. Collaborative engagement promotes a culture of teamwork and shared responsibility among educators. It helps improve problem-solving and decision-making through diverse perspectives. When teachers collaborate regularly, they can enhance instructional practices and student outcomes. This approach strengthens the overall learning environment by aligning efforts toward common goals.

To ensure that teachers understand and align with school goals, public school administrators in Cotabato Province implement strategies such as collaborative planning, peer feedback, professional development workshops, classroom observations, data-driven discussions, and school-wide learning communities. As mentioned:

Collaborative planning and peer feedback, professional development workshops and training, classroom observations and feedback, data-driven discussions and progress monitoring and school-wide professional learning communities. (Informant 2 RQ1.1 L 21-26)

Providing ongoing training and support for teachers on project-based learning (PBL) implementation through workshops, mentoring, and peer observation ensures effective adoption and continuous improvement in teaching practices. As stated by the informant:

Provide ongoing training and support to teachers on PBL implementation. This could include workshops, mentoring and peer observation. (Informant 4 RQ1.2 L 50-53)

Collaborative engagement among educators has been shown to significantly enhance instructional practices and student outcomes. A study by Shand and Goddard (2024) found that increased teacher collaboration positively influenced instructional quality, school climate, and trust among educators, which are critical factors for student achievement. Similarly, Gamboa (2023) reported that teacher collaboration in the Philippines led to improved teaching effectiveness, particularly when supported by targeted training programs. These findings underscore the importance of fostering collaborative environments in schools to drive continuous improvement in teaching and learning.

Table 1

Themes on Cultivating Instructional Leadership Culture

Global Theme	Organizing Theme	Basic Theme
Cultivating a Systematic Instructional Leadership Culture	Clear Instructional Alignment	Strategic Communication & Goal-Setting
	Professional Development and Mentoring	Continuous Capacity-Building
	Monitoring and Evaluation	Regular Supervision and Feedback
	Collaborative Engagement	Shared Instructional Planning

The table 1 shows the key components of cultivating a systematic instructional leadership culture. Clear instructional alignment, facilitated by strategic communication and goal-setting, ensures educators remain focused on common objectives (Madulara et al., 2025). Professional development and mentoring are essential for continuous capacity-building, as they provide ongoing support and opportunities for teacher growth (Cereno & Quinito, 2025). Regular monitoring and evaluation, including supervision and feedback, play a critical role in maintaining effective teaching practices (Bellibaş et al., 2025). Lastly, collaborative engagement, through shared instructional planning, strengthens the teaching community and improves instructional quality (Potane et al., 2023).

Public School Administrators' Perception of Instructional Leadership in Improving Student Outcomes

Strategic Role-Balancing. Strategic role-balancing ensures clarity in responsibilities across teams. It helps prevent duplication of tasks and reduces internal conflict. Leaders can make quicker decisions because roles are well defined. This approach also improves accountability at every level.

Effective administrators balance their duties by prioritizing instructional leadership, delegating tasks, and using efficient systems to focus more on teaching and learning. As mentioned:

Effective administrators balance their duties by prioritizing instructional leadership, allocating specific times for administrative tasks and instructional coaching. They also delegate administrative responsibilities to other staff members, freeing up time to focus on teaching and learning. Additionally, they use technology and efficient systems to streamline administrative tasks, allowing them to concentrate on supporting teachers and improving student learning. (Informant 7 RQ2.1 L 147-158)

More so, duties are balanced through task delegation, strategic time management, and the use of efficient systems to support mentoring, classroom observations, and professional development. As stated by an informant:

I balance my duties by delegating tasks, prioritizing instructional leadership, and maximizing time management. We streamline administrative work through efficient systems, allowing us to focus on teacher mentoring, classroom observations, and professional development. By fostering a shared leadership culture, they ensure both operational efficiency and continuous improvement in teaching and learning. (Informant 13 RQ2.1 L 248-258)

Strategic role-balancing is essential for organizational effectiveness, as it enables leaders to align operational efficiency with adaptability. Roh and Xiao (2024) emphasize the importance of ambidexterity in supply chain management, highlighting that organizations must simultaneously pursue efficiency and flexibility to remain competitive in dynamic environments. Similarly, Takawira and Mutambara (2023) identify key strategic leadership roles—such as setting strategic direction and managing organizational culture—as pivotal for sustaining competitive advantage in emerging markets. These studies underscore that effective strategic role-balancing involves a combination of clear leadership, adaptability, and the integration of efficient systems to navigate complex organizational landscapes.

Instructional Improvement Initiatives. Instructional improvement initiatives lead to better teaching strategies and clearer learning goals. They help teachers identify student needs and adjust instruction accordingly. These initiatives support continuous learning among educators. As a result, student outcomes improve steadily.

Various assessment methods are used to track student progress and identify learning gaps, with data shared during departmental meetings to guide instructional improvements. As mentioned:

I utilize a variety of methods. Regular formative assessments, like quizzes and class discussions, provide immediate insights into student understanding. I also analyze summative assessment data, such as test scores and project grades, to identify areas where students excel and where they struggle. This data is then shared with my colleagues during departmental meetings, focusing on trends and strategies for improvement. (Informant 15 RQ2.2.2 L 341-351)

Additionally, collaborating with a colleague to design interactive math activities led to improved student understanding and performance, demonstrating the impact of shared instructional strategies. As stated:

One example involves working with a colleague who was struggling to engage students in a particularly challenging math unit. By collaboratively designing activities that incorporated hands-on manipulatives and small group problem-solving, we saw a significant improvement in student understanding and test scores. This experience highlights how sharing expertise and collaborating on instructional strategies can directly impact student learning outcomes, even without a formal leadership title. (Informant 16 RQ2.2.1 L 368-380)

Instructional improvement initiatives are pivotal in enhancing teaching practices and student outcomes. Bellibaş et al. (2025) found that instructional leadership significantly influences student achievement, mediated by teacher professional development and cognitively engaging teaching strategies. In the Philippine context, Jimenez and Galicia (2023) emphasized that effective instructional leadership correlates with improved school performance, highlighting the importance of leaders in guiding teaching practices. Additionally, the Department of Education (2025) introduced updated guidelines promoting continuous improvement through frequent observations and technical assistance, aiming to address instructional gaps and enhance teaching effectiveness.

Data-Informed Supervision. Data-informed supervision helps leaders make decisions based on evidence instead of guesswork. It highlights patterns in performance and points out areas that need support. Teachers can receive specific feedback tied to actual results. This approach increases accountability and clarity across the system.

Conducting post-tests using EGRA, ARATA, PHIL-IRI, RMA, and CRLA will effectively measure learners' progress and provide a clear basis for targeted teacher feedback. As asserted by an informant:

Through the conduct of post-test of EGRA ARATA, PHIL-IRI, RMA and CRLA will determine the progress of the learners and will be the basis of teachers feedbacking. (Informant 6 RQ2.2.2 L 143-146)

Moreover, in response to the CRLA pretest showing 7 out of 80 Grade 2 learners at a "low emerging" reading level, one-on-one or guided reading interventions were implemented and prioritized in the PIP with stakeholder support and AIP funding. As claimed by one of the informants:

In our school, 7 out of 80 Grade 2 learners were under "low emerging" or very poor in reading based on the results of CRLA pretest. They cannot even recognize letter sounds. I prioritized this concern in the Project Implementation Plan (PIP), consulted the stakeholders and included in the AIP for funding. One on one reading or guided reading was the intervention done by the teachers to solve this issue. (Informant 11 RQ2.2.1 L 223-232)

Data-informed supervision has emerged as a pivotal approach in educational leadership, emphasizing the integration of data analytics with human judgment to enhance decision-making processes. Baule (2024) underscores the necessity for educational leaders to critically assess data sources, ensuring they are valid, unbiased, and contextually relevant to avoid perpetuating existing inequalities. Similarly, the Data-Informed Leadership for Equity (DILE) initiative by the Institute of Education Sciences (2023) highlights the importance of using real-time data to address disparities in student experiences, particularly concerning sense of belonging, disciplinary actions, and absenteeism. Furthermore, Fernandes and Henderson (2020) advocate for a comprehensive understanding of the interplay between staff competence, organizational structure, and leadership dynamics to effectively implement data-driven leadership in schools.

Table 2

Themes on Public School Administrators' Perception of Instructional Leadership

Global Theme	Organizing Theme	Basic Theme
Leading Instruction to Maximize Learning Impact	Strategic Role-Balancing	Instruction-Focused Time Management
	Instructional Improvement Initiatives	Leadership for Targeted Student Gains
	Data-Informed Supervision	Feedback Based on Learning Evidence

Table 2 illustrates the core themes of instructional leadership strategies that enhance student learning outcomes. Recent studies (e.g., Darling-Hammond et al., 2023; Murphy & Hallinger, 2021) emphasize that leaders who strategically manage their time, lead targeted instructional initiatives, and provide feedback based on student data significantly boost teaching effectiveness and learner performance. Aligning with Kraft and Gilmour (2020), the focus on data-informed supervision and evidence-based feedback reinforces the critical role of instructional leaders in driving continuous school improvement.

Factors Influencing Decision-Making in Instructional Leadership and Curriculum Development Among Public School Administrators in Cotabato Province

Goal-Driven Instructional Design. Goal-driven instructional design helps ensure that teaching methods align with clear learning objectives. It encourages a focused approach where both teachers and students understand what needs to be achieved. By setting specific goals teachers can better measure progress and adjust lessons as needed. This approach leads to more effective learning outcomes and improves the overall teaching process.

Goal-driven instructional design, aligned with national standards, ensures that programs are effectively monitored and evaluated to meet the required educational outcomes and improve student achievement. As supported by the informant:

It should be aligned with the national standard and by monitoring and evaluating the implementations of the program in line with the national education standards. (Informant 5 RQ3.2.1 L 163-166)

Additionally, to ensure local curriculum development aligns with regional or national educational standards, a Curriculum Alignment Team will review standards, analyze local needs, create aligned frameworks, and conduct ongoing reviews and revisions. As stated:

To ensure local curriculum development aligns with regional or national educational standards: We establish a Curriculum Alignment Team that will reviews national and regional standards, analyzes local curriculum needs, develops aligned curriculum frameworks, and conducts regular reviews and revisions. (Informant 2 RQ3.2.1 L 41-48)

The Learning-Goals-Driven Design (LGDD) model, developed by Krajcik et al. (2008), emphasizes the alignment of curriculum materials with clearly defined learning goals and national standards, integrating project-based pedagogy to enhance student engagement and understanding. This approach involves unpacking standards, developing learning performances, and ensuring coherence across instructional activities and assessments. Recent applications of LGDD have demonstrated its effectiveness in fostering deeper conceptual understanding and improving instructional quality through iterative design and feedback cycles.

Alignment with Standards. Alignment with standards ensures that instructional practices meet educational objectives. It provides a clear framework for educators to design lessons that directly address key learning goals. This alignment promotes consistency in student learning outcomes. It also supports accountability by making it easier to assess student progress against established benchmarks.

Local curriculum development aligns with regional and national standards by using them as a foundation for design and adaptation, with continuous reviews to maintain compliance. As stated:

To ensure alignment with regional/national standards, local curriculum development begins with a thorough review and analysis of those standards. These standards then form the framework for all curriculum design and adaptation. Regular reviews and updates ensure ongoing compliance. (Informant 1 RQ3.2.1 L 12-18)

More so, a Curriculum Alignment Team is established to review national and regional standards, assess local curriculum needs, create aligned frameworks, and perform ongoing reviews and revisions to ensure consistency. As supported by an informant:

To ensure local curriculum development aligns with regional or national educational standards: We establish a Curriculum Alignment Team that will reviews national and regional standards, analyzes local curriculum needs, develops aligned curriculum frameworks, and conducts regular reviews and revisions. (Informant 2 RQ3.2.1 L 41-48)

Aligning curricula with educational standards is vital for ensuring that instruction meets established learning goals and prepares students effectively for assessments. Recent studies highlight the importance of this alignment in various educational contexts. For instance, Balagtas (2021) examined the alignment of the Philippine mathematics teacher education curriculum with the Programme for International Student Assessment (PISA) framework, identifying areas where the curriculum met international standards and areas needing improvement. Similarly, Fajardo et al. (2022) evaluated the constructive alignment of the K to 12 curriculums in the Philippines, focusing on how well learning activities and assessments developed 21st-century skills among students. These studies underscore the necessity of aligning curricula with standards to enhance educational quality and student outcomes,

Evidence-Based Decision Making. Evidence-based decision making improves the accuracy of educational practices by relying on data-driven insights. It helps ensure that policies and strategies are grounded in reliable evidence rather than assumptions. This approach enhances accountability and transparency in decision-making processes. It also supports continuous improvement by identifying what works and what needs adjustment.

The selection of the best curriculum model or instructional strategy is based on analyzing performance data, teacher readiness, resource availability, DepEd standards, best practices, and community needs, with continuous feedback and assessment guiding sustainable improvements. As stated:

We determine the best curriculum model or instructional strategy by analyzing **student performance data, teacher readiness, and resource availability**. We also consider **DepEd standards, research-based best practices, and community needs** to ensure alignment with long-term school goals. Through **pilot testing, feedback from stakeholders, and continuous assessment,** we select strategies that drive sustainable improvements in teaching and learning. (Informant 13 RQ3.2.2 L 334-345)

A thorough cost-benefit analysis, which considers resource implications and potential impact on student outcomes, guides the final decision. As mentioned by the informant:

A thorough cost-benefit analysis, considering resource implications and potential impact on student outcomes, informs the final decision. (Informant 1 RQ3.2.2 L 23-27)

Evidence-based decision-making (EBDM) in education is increasingly recognized as a critical approach for enhancing instructional effectiveness and student outcomes. Wilcox et al. (2021) emphasize that EBDM enables educators to select and implement interventions that are responsive to the diverse needs of learners, particularly in inclusive education settings. Additionally, Pellegrini and Vivanet (2021) discuss the growing emphasis on evidence-informed policies within European education systems, highlighting initiatives aimed at integrating research findings into policy development and practice. In the Philippine context, the Department of Education's Basic Education Research Agenda underscores the importance of EBDM by promoting research that informs policy-making and curriculum development (Department of Education, 2016). These perspectives collectively underscore the pivotal role of EBDM in fostering educational practices that are both effective and contextually relevant.

Table 2

Themes on Factors Influencing Decision-Making in Instructional Leadership and Curriculum Development Among Public School Administrators

Global Theme	Organizing Theme	Basic Theme
Data-Driven and Goal-Oriented Curriculum Leadership	Goal-Driven Instructional Design	Curriculum Aligned with School Objectives
	Alignment with Standards	Compliance through Review and Mapping
	Evidence-Based Decision Making	Research and Data Inform Strategy Choice

The Table 2 highlights key factors influencing instructional leadership and curriculum development, focusing on goal-driven design, standard alignment, and evidence-based decision-making. Studies such as Krajcik et al. (2008) and Sharma (2024) emphasize aligning curriculum with learning goals and educational standards to ensure coherence and contextual relevance. Evidence-based practices, supported by Wilcox et al. (2021) and Abrahams et al. (2021), further strengthen strategic decisions by grounding them in data and research insights.

SUMMARY, CONCLUSIONS, RECOMMENDATIONS

This chapter presents the summary of major findings, the conclusions derived from the analysis, and practical recommendations based on the results of the study. This chapter encapsulates the overall significance of the research on instructional leadership among public school administrators in Cotabato Province.

Summary of Findings

The following provides the significant findings of the study:

1. The results of the Kaiser-Meyer-Olkin (KMO) Measure of Sampling Adequacy, which yielded a value of .946, and Bartlett's Test of Sphericity (χ^2 = 12088.483, p < .001), confirmed that the dataset was highly suitable for factor analysis. These values indicated strong inter-item correlations, affirming the appropriateness of the data for identifying latent constructs related to instructional leadership among public school administrators in Cotabato Province.

2. Using Principal Component Analysis with Varimax rotation, six distinct factors emerged, accounting for 69.462% of the total variance. These six dimensions were identified as: Provide Incentives for Teachers, Promote Professional Development, Framing the Goals, Professional Growth and Support, Teacher Recognition and Development, and Collaborative and Ongoing Professional Development. Each factor demonstrated high and distinct loadings, reflecting strong internal consistency and construct validity within the identified dimensions.

3. Regarding model fit, the six-factor structure showed acceptable indices (CFI = .841; RMSEA = .086), but a refined five-factor model revealed a better overall fit (CFI = .907; RMSEA = .076; AIC = 1238.987), suggesting it offered a more parsimonious and statistically robust representation of instructional leadership behaviors. This refined model effectively captured the interrelated constructs of leadership practice in a more efficient framework.

4. Structural modeling revealed meaningful relationships between leadership constructs. Providing Incentives (F1) significantly influenced Professional Development (F2), Teacher Recognition (F5), and Collaborative Professional Development (F6). Additionally, Framing the Goals (F3) and Professional Support (F4) showed strong contributions to these domains, highlighting the importance of leadership clarity and constructive feedback in enhancing teacher engagement and school collaboration. The connection between Professional Development (F2) and Collaboration (F6) also emphasized that ongoing professional learning naturally evolves into team-based practices.

5. The qualitative findings further identified four key strategies employed by administrators to promote instructional leadership: clear instructional alignment through effective communication and monitoring; professional development and mentoring that support continuous and personalized teacher growth; monitoring and evaluation systems to ensure accountability; and collaborative engagement through shared planning and peer learning. These practices highlight how school leaders strategically support teaching effectiveness.

6. Administrators perceived their leadership roles as pivotal in improving instruction and outcomes. They reported strategic role-balancing to effectively manage administrative and instructional tasks, while also initiating improvement programs that target student needs and instructional gaps. Data-informed supervision was also emphasized, as it enabled evidence-based feedback that enhanced teaching practices and ensured ongoing progress.

7. Lastly, three major factors were identified as influencing instructional leadership and curriculum decision-making: goal-driven instructional design aligned with national standards, curriculum alignment with regional and national benchmarks through regular review, and evidence-based decision-making that integrated data, teacher readiness, and resource allocation. These components provided a framework for administrators to develop relevant and effective instructional strategies grounded in data and aligned with educational objectives.

Conclusions

Based on the findings, the following conclusions were drawn:

1. The data collected was statistically adequate and appropriate for factor analysis, confirming its validity for examining instructional leadership constructs.

2. Six core dimensions of instructional leadership were identified, reflecting consistent and valid patterns of school leadership practices.

3. The five-factor model provided a stronger and more efficient structure for understanding instructional leadership than the original six-factor model.

4. Instructional leadership dimensions are interconnected, with incentives, clarity in goals, and professional support significantly contributing to teacher development and collaboration.

5. School administrators implement strategic practices such as alignment, mentoring, monitoring, and collaboration to enhance teaching quality.

6. Administrators view their leadership as essential to balancing instructional and administrative roles while driving improvement through evidence-based strategies.

7. Instructional and curriculum decisions are influenced by clear goals, alignment with standards, and the use of data to support effective and context-based practices.

Recommendations

It is recommended that:

1. Future instructional leadership studies apply factor analysis to ensure data validity and to guide evidence-based leadership development frameworks.

2. School administrators should strengthen leadership programs that focus on the six validated dimensions to enhance instructional quality and school performance.

3. Educational policymakers and practitioners are encouraged to adopt the five-factor model as a simplified yet effective guide for implementing instructional leadership initiatives.

4. Leadership training should emphasize the integration of goal-setting, incentive systems, and professional support to promote holistic teacher development.

5. Administrators should continuously implement strategic alignment, mentoring, and collaborative practices to sustain effective instructional leadership.

6. It is advised that school leaders engage in regular training on evidence-based leadership to balance administrative tasks while improving learning outcomes.

7. Curriculum planners and school heads should use data-driven, goal-oriented, and standards-aligned approaches when making instructional and curricular decisions.

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