

# Instructional Supervision Practices of School Heads in Relation to Teachers' Creativity

Joel P. Perez

**Abstract.** This study aims to determine the extent of instructional supervision practices of school heads and their impact on teachers' creativity among schools in the Governor Generoso South Davao Oriental Schools Division. A non-experimental descriptive-correlational research design was employed using an adapted survey instrument to gather responses from randomly selected teacher-respondents. Data were analyzed using Mean scores, Pearson  $r$ , and Simple Linear Regression Analysis. Findings revealed that school heads' supervision practices were less extensive, particularly in protecting instructional time, monitoring student progress, maintaining visibility, and evaluating instruction. Teachers' creativity, indicated by innovative, explorative, and strategic approaches, was found to be moderately extensive. A significant relationship was found between instructional supervision practices and teachers' creativity. This study suggests that enhancing supervision practices can foster greater creativity among teachers.

## KEY WORDS

1. Instructional Supervision Practices 2. Teachers' Creativity 3. School Heads

Date Received: May 21, 2024 — Date Reviewed: May 23, 2024 — Date Published: June 5, 2024

## 1. Introduction

Education is an indispensable means of transmitting the skills and knowledge required for individuals to fully participate and contribute to the development of a country's economic, social, and political activities. Principals, as school heads, play a critical role in providing instructional leadership to ensure high-quality teaching and learning. Effective instructional supervision by school heads can significantly enhance the creativity of teachers, which is crucial for improving educational outcomes. However, in Governor Generoso South Davao Oriental Schools Division, instructional supervision practices may not be fully effective. This study aims to investigate the extent of these practices and their impact on teachers' creativity, addressing a significant gap in understanding how supervision influences educational quality in this specific context. Instructional leadership practices are leadership roles directly related to the teaching process, involving the interaction between teachers, students, and the curriculum (Quah, 2011). Instructional leadership in time management and supervising teachers will improve the quality of teaching and learning outcomes and enhance the attainment of educational goals and objectives. Ahmed (2016) highlighted instructional leadership practices to include framing school goals, communicating school goals, supervising, and evaluating

instruction, coordinating the curriculum, monitoring students' progress, protecting instructional time, maintaining high visibility, providing incentives for teachers, promoting professional development, and providing incentives for students. Instructional leadership practices of principals are directly linked to creating the conditions for optimal teaching and learning. In the context of this study, instructional leadership practices could be referred to as administrative activities and roles that are geared towards providing support for teachers and students to ensure quality instructional delivery for school effectiveness. The instructional leadership practices adopted by the above author in this study are instructional supervision and time management. In the Philippines, most of the school heads do and perform Instructional supervision, which is the act of checking, watching, and observing the activities of teachers, which is geared toward coaching and mentoring them as well as providing professional guidance, direction, leadership, and assistance for professional development in order to improve the quality of instructional delivery. Clark (2015) sees supervision as improving instruction through regular monitoring and in-service education of teachers. In the view of Nnebedum and Akinfolarin (2017), instructional supervision is the actions taken to mentor and monitor subordinates or teachers and provide a supportive and conducive atmosphere for improving the instructional process. Principals' supervision of instruction practices includes checking teachers lesson notes, scheme of work, students notes, teachers punctuality, teachers regularity in class, classroom observation, moderation of examination papers, and marking schemes, among others (Sule, Ameh Egbai, 2015). Instructional supervision helps to ensure that instructional delivery is painstakingly planned, effectively executed, and properly evaluated. As the instructional leader, the school principal is entrusted with the responsibility of improving the qual-

ity of instructional delivery through adequate supervision of teachers (Nnebedum Akinfolarin, 2017). Regular and timely supervision of teachers and professional guidance and assistance will not only minimize instructional time wastage but also encourage the timely discharge of their duties, thereby ensuring effective time management in the school. In the locality of Governor Generoso South District, the same activities have been exhibited by the School Principals; however, much as they desired to be effective, learners who are lagging are subjected to undergo alternative delivery mode. Teachers are oftentimes charged as the bridge to overcome low learner performance. Teachers are expected to perform high as expected; they are assumed to be all prepared, and thus, quality delivery of instruction is admired. However, much to the desire of the standards, teachers are sometimes lagging in their respective pedagogical performances resulting in learners' lagging performance. This study desires to review and assess the instructional supervision practices of school heads and teachers to determine their effectiveness in augmenting learners' academic performance who are under alternative delivery modes and improving proficiency in reading, comprehension, and numeracy. Thus, this is conducted.

### *1.1. Review of Significant Literature—*

*1.1.1. Instructional Supervision Practices—*Instructional supervision is a continuous professional process aimed at improving instruction through guidance, sharing ideas, and facilitation. Goldhammer et al. (1993) and Cogan (1973) identified five major steps in clinical supervision: planning, classroom observation, analysis, post-observation conference, and post-conference analysis. Effective supervision enhances teaching quality and student achievement but is often hindered by lack of resources and excessive administrative workloads (Wieczorek et al., 2019).

Effective instructional leaders implement

research-based strategies, continually interact with teachers to improve processes, and focus on the professional growth of teachers to stimulate educational quality (Dea, 2016; Victor Ematarum, 2017). Personality types also play a role, with enterprising personalities positively impacting school performance (Peter et al., 2021). Additionally, effective supervision requires overcoming challenges such as financial constraints and inadequate infrastructure through creative solutions (Mansor et al., 2022).

*1.1.2. Monitoring Students' Progress*—Progress monitoring helps teachers enhance student learning and inform instructional decisions. Tools and methods include quizzes, standardized tests, and formative assessments (Suriagiri et al., 2022; Hazi, 2022). Effective monitoring involves evaluating interventions and ensuring plan fidelity (Conley et al., 2019). Peer assessment and machine learning are also used to predict and monitor student performance (Ashenafi et al., 2016; Khan et al., 2021). Additionally, social networks can facilitate progress monitoring in higher education (Krivoya et al., 2021).

*1.1.3. Teachers' Creativity*—Creativity in teaching involves using imaginative approaches to make learning more interesting and effective (Sternberg, 2001). Transformational leadership and teamwork can significantly enhance teacher creativity (Rais Bibin, 2020). Professional creativity strongly correlates with teaching effectiveness, indicating its importance in educational settings (Abdula-Zade et al., 2021). Moreover, technology plays a crucial role in fostering creativity among teachers, although its classroom application varies (Fitriah, 2018).

*1.2. Theoretical and Conceptual Framework*—This study is anchored on the theory of Weber (1996), who identified five essential domains of instructional leadership, which include; defining the mission, managing the curriculum and instruction, promoting a positive learning environment, observing, and improving instruction, and assessing the instructional

program. In the 1970s, Ronald Edmonds began publishing research on what has been referred to as instructional leadership. Edmonds basically found that school-building leaders who focus on learning in their conversations and actions have a deeper impact on student learning. Leithwood (1994) asserts that instructional leadership is a series of actions with the aim of impacting classroom instruction unswervingly through staff development, modeling, coaching, supervision, and additional means of persuading teachers' practice and thinking. Generally speaking, leadership can also be labeled as a social procedure that motivates an individual's abilities and aims, their analysis of external and internal doings, interpersonal communication, and a group's common direction (Hoy Miskel, 2010). According to the theory, through leadership training, school principals learn about high-quality instruction and about actions that they can take to motivate and support their teachers. Principals then organize professional learning for their teachers and help them improve their classroom practices. With improved instruction, the theory maintains, student achievement will also improve. Moreover, providing instruction related to professional development to school principals set in motion a chain of events that can improve teaching and learning in their schools. Through technical assistance to school districts, primarily through strategic planning, coaching, and professional development for district and school administrators, it has also enunciated a set of principles of learning about the ideas and practices that promote students' academic achievement. It has also been established that principals who received more professional development were more actively involved in the professional development of their teachers. Teachers who got more professional development taught lessons that were of higher instructional quality, and schools where instructional quality was higher also had students with higher academic achievement. Previous studies

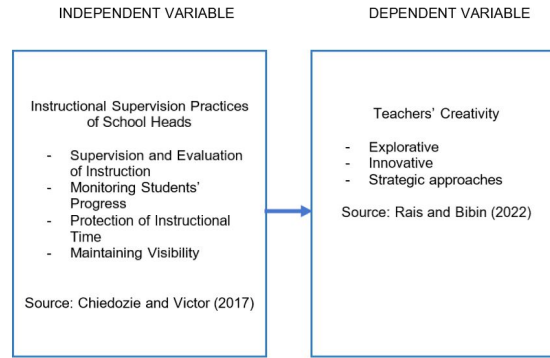


Fig. 1. Conceptual Framework of the Study

have found that the physical environment can influence students' psychology and social behavior and, thus, significantly influence learning (Moulton, 2001; Milpo, 2002). Many studies conducted show that the learning environment can affect learning outcomes and student development (Serris Miller, 2011; Evans, 2006; Kabeta et al., 2015). Research asserts that Instructional Leadership by headteachers affects the teaching and learning process positively and consequently leads to high pupil performance; thus, it identified Instructional Leadership by headteachers as a priority in enhancing the quality of teaching and learning in schools. Maina (2010) argues that numerous factors contribute an important part in enhancing the academic performance of students, which among them include school resources, skills and abilities of the teachers, school ethos, and classroom envi-

ronments, among others. Kabeta et al. (2015) also state that the quality of school leadership matters and recommends that head teachers be instructional leaders if the quality of teaching and learning has to improve. An effective head teacher will ensure that there is a conducive environment for both teaching and learning. In this study, figure 1 shows the association of the variables given establishments of several types of research. Further, instructional leadership practices of school heads to teachers in terms of supervision and evaluation of instruction, monitoring students' progress, protection of instructional time, and maintaining visibility will be tested its effectiveness to augment learners who are under Alternative Delivery Mode where their proficiency in terms of reading, comprehension, and numeracy skills.

1.3. *Statement of the Problem*—The purpose of the study was to assess the extent of instructional supervision practices of school heads

concerning teachers' creativity among schools in Governor Generoso South, Davao Oriental Schools Division. This specifically sought to answer the following statement of the problem:

- (1) What is the extent of instructional supervision practices of school heads to teachers in terms of
  - (1) supervision and evaluation of instruction?
  - (2) monitoring students' progress?
  - (3) protection of instructional time? and
  - (4) maintaining visibility?
- (2) What is the extent of teachers' creativity in terms of;

- (1) explorative?
- (2) innovative? and
- (3) strategic approaches?
- (3) 3. Is there a significant relationship between instructional supervision practices and teachers' creativity?
- (4) Which among the domains of instructional supervision practices significantly influence teachers' creativity?

*1.4. Hypothesis*—To answer the posed statement of the problem and provide empirical evidence given the posed theoretical and conceptual frameworks, null hypotheses were tested at 0.05 alpha level of significance, stating: Ho1: There is no significant relationship between instructional supervision practices and teachers' creativity. Ho2: None of the domains of instructional supervision practices significantly influence teachers' creativity.

*1.5. Significance of the Study*—The proposed study's goal was to assess the effectiveness of the instructional leadership practices of school heads and teachers in improving learners' proficiency under alternative delivery modes among schools in Governor Generoso South, Davao Oriental Schools Division. This study was beneficial to the significant stakeholders for it provides significant inputs and bases in the instructional leadership practices among school heads and how it affects the learners' proficiency given under alternative delivery mode. This further gives an impression of the school head's supervision and teachers' creativity, who manage and deliver the curriculum and assessment and thus provide scientific strategies to augment learners' cognitive development processes. School Principals. School heads were expected to manage the school's overall performance and thus produce strategic direction by leading learners in augmenting proficiency skills. Thus, the results of the study would provide insights to school heads of Governor Generoso South District as to the extent of instructional leadership practices exhibited in the respective schools and thus be of help as an

intervention in making teachers enhance pedagogical skills and learners' proficiency under alternative delivery mode. Teachers. Teachers follow directions based on the curriculum management and assessment of learners that was comprehensive and doable at each time and cost. Teachers also facilitate learning and delivery based on needed modalities set by the schools, as well as per the direction of the Division and Regional office orders and memoranda. In this context, teachers ensured that their efforts in the implementation and facilitation of the learning modalities that could augment proficiency skills among learners were ensured. The study's results would give them an idea to see clearly if the instructional leadership practices of school heads are productive and contribute to the performance of the entire school's curriculum management and implementation. Parents. Parents play significant roles in the augmentation of learning modalities that fit the needs of the learners. The results of the study will give insights and enlightenment to the members of the PTA and the school governing council as well as advocate empowerment through facilitating learning modalities and styles through instructional leadership practices of school heads to continuously improve the process and performance of learners' academic achievement as well through full participation in the whole cycle process. Future Researchers. Implications based on the study's generated results will provide future researchers with more information to replicate the practices to be discovered in the proposed study. Practices on instructional leadership are expected to change the direction

of learners' academic performance and the efficiency elements in improving quality outputs through the process introduced to make learners manifest sound proficiency outcomes. The following terms are variables in the study and definitions by the concept and operation were presented according to how the terms are used in the context of the study. This would serve as a reference in the analysis and interpretation of the results to produce meaningful implications for a better recommendation. Instructional Supervision Practices. The term refers to the supervision roles directly related to the teaching process, involving the interaction between teachers, students, and the curriculum (Quah, 2011). Instructional supervisors support teachers in their practice by facilitating professional development opportunities. They also support teachers by providing coaching and mentoring to ensure

best practices were used in their schools. In this study, the term was used as the independent variable, where indicators of instructional supervision practices refer to the supervision and evaluation of instruction, monitoring students' progress, protecting instructional time, and maintaining visibility on campus. Teachers' Creativity. The term refers to Creativity as a cluster of skills needed to produce original and valuable ideas (Sternberg, 2021). Teaching Creatively has been defined as 'teachers using imaginative approaches to make learning more engaging, exciting, and compelling. In this study, the term is used as the dependent variable that defines the teachers under the alternative delivery mode of instruction that measures the explorative, innovative, and strategic approaches in Governor Generoso South District, Davao Oriental Schools Division.

## 2. Methodology

In this chapter, we will outline the processes and steps involved in conducting the study. This will encompass selecting the study's design, identifying the respondents and the sampling method, choosing the research instruments for data collection, and delineating the data analysis process. The researcher employed artificial intelligence methods to meticulously proofread this work during its preparation. Artificial Intelligence (AI) was expressly utilized to enhance the overall quality, coherence, and precision of the manuscript. This methodology is being openly communicated to adhere to ethical norms in research. Leveraging AI for proofreading underscores a commitment to the responsible use of innovative technologies and acknowledges AI's growing role and potential in professional and academic writing.

*2.1. Research Design*—This study employed a non-experimental descriptive-correlational research design to explore the relationship between instructional supervision practices and teachers' creativity. Descriptive statistics summarized the extent of supervision practices, while correlational analysis assessed the relationship between the variables. Moreover, these designs aim to get a picture of the current thoughts, feelings, or behaviors in each group of people. Descriptive research is summarized using descriptive statistics. Correlational re-

search designs measure two or more relevant variables and assess a relationship between or among them. (Pallant, 2020). On the other hand, this type of research tries to extrapolate from the analysis of existing phenomena, policies, or other entities to predict something that has not been tried, tested, or proposed before (Gujarati, 2020). In this study, the extent of instructional, supervisory practices of school heads to teachers was tested its association to augment teachers' creativity in terms of explorative, innovative, and strategic approaches. Such that

the researcher assessed instructional supervision practices of school heads in the creativity among teachers and thus, assumed that it is effective towards the proficiency levels of learners.

2.2. *Research Respondents*—The respondents were public school teachers from the Governor Generoso South District Schools, Davao Oriental. Using the Raosoft sample size calculator, 120 teachers were randomly selected. Ethical standards were strictly observed, and informed consent was obtained from all participants. Inclusions of the respondents are assumed and expected to be a part of every activity in the implementation process of curriculum management and delivery. Further, these respondents were actively part of the daily teaching and learning processes. They have direct knowledge of these along with school heads and, thus, assumed that their perception of the school heads instructional leadership practices and indicators is highly observable. Sometime in the second week of January 2023, the researcher took the population of the teachers in Governor Generoso Schools South District, and to get the sample from the population, he used the Raosoft sample size calculator, where a total of 120 respondents were taken randomly from the respective schools. Once randomly determined, the respondents were informed through online platforms or text / direct personal messages for orientation of the purpose and importance of the study. The researcher further observed ethics in research which paved the way for a respondent to decline, and thus, corresponding forms of consent / decline were provided. In this manner, ethical standards of research as part of the policy of the Rizal Memorial Colleges were strictly followed. Thus, observance of health protocol was likewise implemented based on the Executive Orders released by the government of Governor Generoso, Davao Oriental, to avoid possible and lower the risk of contamination.

2.3. *Research Instrument*—A survey instrument adapted from relevant literature was used. It underwent reliability and validity testing, yielding a Cronbach Alpha coefficient of 0.876, indicating high consistency. The instrument included items measured on a 5-point Likert scale, assessing the extent of instructional supervision practices and teachers' creativity. This statements survey was carefully articulated to ensure correct responses and thus made meaningful in the generation of implications from the discussions of the results. This was thoroughly done through exploring the explicit methods of activities being done in the respective schools. This statement survey is established to fully found as it is important to ensure quality conclusions and recommendations in the later part of the paper emphasizing the effect of the extent of instructional leadership practices of school heads to teachers and its significant difference after having it applied, and to determine its effectiveness to improve proficiency skills development through reading, comprehension and numeracy during SY 2022-2023 (J. F. Pallant, 2011). The researcher made the survey instrument subjected to a test-retest or validity and reliability testing using Cronbach Alpha at .05 level of confidence where expected correlation-reliability coefficients from among the statements must be achieved. This was given to two set groups of respondents to test the content validity and reliability of the instrument, thus being ready for data gathering. Results generated a .876 Cronbach Alpha coefficient, which means 87.6 percent of the items were consistent; thus, it was a valid and reliable instrument to gather responses. The questionnaire used a 5-point Likert scale to determine the extent of the instructional leadership practices of school heads to teachers. Scale, descriptive rating, and interpretation are provided below:

Scale	Descriptive Rating	Interpretation
4.20 – 5.00	Very Extensive	The instructional supervisory practices of school heads are always manifested
3.40 – 4.19	Extensive	The instructional supervisory practices of school heads are oftentimes manifested
2.60 – 3.39	Moderately Extensive	The instructional supervisory practices of school heads are sometimes manifested
1.80 – 2.59	Less Extensive	The instructional supervisory practices of school heads are rarely manifested
1.00 – 1.79	Not Extensive	The instructional supervisory practices of school heads are not manifested

Meanwhile, to determine the association of the instructional supervision practices of school heads to teachers to teachers' creativity, a 5-point Likert scale was used to measure the variable used in this study; this is as presented below;

Scale	Descriptive Rating	Interpretation
4.20 – 5.00	Very Extensive	The teachers' creativity is always manifested
3.40 – 4.19	Extensive	The teachers' creativity is oftentimes manifested
2.60 – 3.39	Moderately Extensive	The teachers' creativity is sometimes manifested
1.80 – 2.59	Less Extensive	The teachers' creativity is rarely manifested
1.00 – 1.79	Not Extensive	The teachers' creativity is not manifested

2.4. *Data Gathering Procedure*—This portion of the conduct of research sets the procedure and discusses the step process in the distribution and data collection. This detailed the content when getting permission to conduct the study, distribute, and retrieve the questionnaire, as well as the collation and statistical treatment of data. Data were collected in January 2023 through Google forms and hard copies. Ethical protocols, including anonymity and confidentiality, were strictly followed. Permission to conduct the study. Prior to data gathering, the researcher prepared the necessary conditions in observance of the health protocol policy of the Local Government of Governor Generoso, Davao Oriental. At this point, as soon as the research proposal presentation was approved by the members of the panel on December 2022, and through the Dean of the college's approval and the guidance of the thesis adviser, the researcher prepared a letter of permission to conduct the study through data gathering. The re-

searcher sought permission from the office of the Schools Division Superintendent of Davao Oriental through channels for approval to collect data from the chosen respondents. He then proceeded to respective Schools, handing the letter of approval to the School Heads of Governor Generoso South District Schools, and, thus, made connections with the teachers in data collection. Ethics in data collection was assumed to have been appropriately observed. Distribution and retrieval of the questionnaire. The researcher prepared a Google form and several hard copies to distribute the questionnaires in asynchronous and synchronous modalities during January 2023. This was sent through a link to the randomly selected respondents through email addresses and personal meetings. Once data was gathered and completed, the researcher double-checked its responses, ensuring no statement survey was unanswered. This prepared me for the next step, which was collating and treating the data gathered. Under circumstances



that respondents declined to participate, the researcher immediately sought a replacement to make the number of respondents complete. Collation and statistical treatment of data. Given that the data gathered were complete, the researcher sought the guidance of the thesis adviser and treated through an expert in data analysis. It is expected that all statement problems generate answers in statistical estimation and computation. This gave meaningful insights into the discussions and interpretations of results. Ethical Considerations. Ethics of research and its corresponding policy were necessary in the conduct of the study. It is imperative to protect the respondents and their profiles to avoid biases. As the author said, anonymity, confidentiality, and informed consent are essential to be considered in the observance of the process (Focus, n.d.; Gustavsen, 2008). Anonymity. Since identified respondents are public school teachers, and most of them are engaged in scouting activities which is part of the study, they should be given consideration that their identity must be hidden. Given this, respondents were given a document to sign for their consent to participate, and on the other hand, when the respondent feels not comfortable joining as part of the research, she/he has the freedom to withdraw the commitment (Creswell Clark, n.d.; Dey, 2018.). The researcher kept the respondents' identity confidential as much as possible, keeping the records secure through protected files and encryption when sending information over the internet or when old-fashioned locked doors and drawers. Lastly, anonymity was important for the success of the survey under certain conditions, for this will help the privacy of the respondents' information that cannot be identified to them. Confidentiality. The researcher had the duty to make the responses confidential in nature as part of the obligation to protect information from unauthorized access, use, disclosure, modification, loss, or theft. This was to build a trusting relationship between the researcher and

the respondents and ensure the integrity of the thesis paper. Everyone has the right to restrict others' access to any information about a profile. Because personal data can always be actively misused, confidentiality is an element in the observance of respect for the individual. Informed Consent. Teachers who were respondents to the study were allowed to be well-informed about the process. This was the part where the respondents could enter voluntarily in nature with full information about what it means to them to take part in the research (Creswell Clark, 2018). This is crucial since the participants are directly involved in the implications of the study results. Without consent, the respondents would not give meaning to their participation in the process of the data collection. In this study, the collected information and responses are from the teachers of Cluster 4 Integrated Schools, Davao City Division, which were kept and protected by the researcher. It is imperative to note that anonymity, confidentiality, and informed consent must be strictly observed during the study's conduct.

2.5. *Data Analysis*—The proposed study used Descriptive statistics (Mean, SD) were used to summarize the data. Pearson r was used to determine the relationship between supervision practices and teachers' creativity, while Linear Regression Analysis identified significant predictors. Pearson Product Moment Correlation Coefficient or Pearson r (Pallant, 2004) was used to determine a significant relationship between school head instructional supervision practices and teachers' creativity to address statement problem number 3. Linear Regression Analysis (Pallant, 2011) was used to test the significant influence among the domains of instructional supervision practices of school heads that impacted teachers' creativity in Governor Generoso South District, Davao Oriental. All data processing and analysis were treated using Jeffrey's Statistics Amazing Program (JASP) version 0.12.20 (Goss-Sampson, n.d.). Discus-

sions and interpretations followed when results were yielded (Norton, 2019).

### 3. Results and Discussion

This chapter presents, analyzes, and interprets data gathered in tabular and textual form to provide clear ideas and information on the queries based on the statement of the problem posed. Various reviews present implications of the results to corroborate and argue the hypothesis and theory as claimed and posed in the study.

*3.1. Instructional Supervision Practices—* Instructional supervision is a continuous professional and cooperative process for the improvement of instruction. It is characterized by guidance, assistance, sharing of ideas, facilitation, or creation to help teachers improve the learning situation and quality of learning in the schools. Goldhammer, Anderson, and Krajewski (1993) and Cogan (1973), as discussed by Deniz and Erdener (2020), identified five major steps in clinical supervision as planning conference, classroom observation/data collection, analysis/strategy, post-observation conference, and post-conference analysis. The purpose of instructional supervision is to improve the quality of teaching by bettering the skills of teachers, which in turn enhances students' academic achievement. Supervision aims to provide accountability for both the supervisor and supervisee, exploring practice and performance. It also enhances and provides additional evidence for annual performance management and review. Instructional supervision in many schools is hindered by a lack of instructional resources, the harsh language used by supervisors, lack of teacher accountability, culture in schools as well as the excessive administrative workload of school heads (Wieczorek et al., 2019). Meanwhile, an effective instructional leader is knowledgeable about research-based, student-centered instruction, models the use of these strategies, and requires implementation of appropriate research-based strategies within the classroom and as a component of continuous improvement plans. Supervision provides equal importance to students and teachers by constantly interacting with the supervisor and the teacher to improve teaching and learning processes. Teachers' continuous learning assists them to be more efficient and effective (Dea, 2016). Indicated in Table 1 is the extent of instructional supervision practices of school heads to teachers in terms of supervision and evaluation of instruction. The result is focused on the highest and lowest mean ratings of indicators which are as follows: Ensure that instructional delivery is painstakingly planned, effectively executed and properly evaluated (2.21); Regular and timely supervision of teachers and provision of professional guidance and assistance encourage timely discharge of their duties, thereby ensuring effective time management in the school (2.21); Check teachers lesson notes, scheme of work, students notes, teachers punctuality, teachers regularity in class, classroom observation, moderation of examination papers and marking schemes among others (2.20); Entrust with the responsibility of improving the quality of instructional delivery through adequate supervision of teachers (2.20) and Provide supportive and conducive atmosphere for improvement on the instructional process (2.00), suggest extent of instructional supervision practices of school heads to teachers in terms of supervision and evaluation of instruction are rarely manifested. The overall mean rating of 2.16 denotes less extensive instructional supervision practices of school heads to teachers in terms of supervision and evaluation of instruction.

Table 1. Extent of Instructional Supervision Practices of School Heads in Terms of Supervision and Evaluation of Instruction

No	Supervision and Evaluation of Instruction	Mean	Descriptive Equivalent
1	Provide a supportive and conducive atmosphere for the improvement of the instructional process	2.00	Less Extensive
2	Check teachers' lesson notes, scheme of work, students' notes, teachers' punctuality, teachers' regularity in class, classroom observation, moderation of examination papers and marking schemes among others	2.20	Less Extensive
3	Ensure that instructional delivery is painstakingly planned, effectively executed, and properly evaluated.	2.21	Less Extensive
4	Entrust with the responsibility of improving the quality of instructional delivery through adequate supervision of teachers	2.20	Less Extensive
5	Regular and timely supervision of teachers and provision of professional guidance and assistance encourage timely discharge of their duties, thereby ensuring effective time management in the school.	2.21	Less Extensive
<b>Overall Mean</b>		<b>2.16</b>	<b>Less Extensive</b>

The aims of instructional supervision are as follows to provide objective feedback to teachers; to diagnose and solve teaching problems; to help teachers develop their strategies and skills; to evaluate teachers for promotions or appointments; and to help teachers maintain a cheerful outlook. An instructional design evaluation is the process of determining whether a training program meets its intended goal. In addition, evaluating the course helps determine whether learners can transfer the skills and knowledge learned into real-world job performance. The most important purpose of assessment and evaluation is to improve student learning. Assessment and evaluations are important tools for designing curriculum and instructional approaches as per the needs of students (Edmunds et al., 2022). Both supervision and evaluation are means to achieve an end that encourage the vi-

sion and culture of the school. Supervision coordinates the efforts and activities that increase student achievement, and evaluations determine accountability to the culture towards that end. Instructional supervision is the process of assisting teachers in the form of guidance, direction, stimulation, or other development activities to develop and improve the teaching and learning process and situation for a better one (Archibong, 2012). Evaluation is the process of determining whether the designed instruction meets its intended goals. In addition, evaluation helps us to determine whether learners can transfer the skills and knowledge learned back into long-term changes in behavior and skills required for the target context. Maranatha and Widodo (2021) conducted a study on the instructional supervision practices of school principals in Indonesia. The authors found that most of

the principals used a combination of observation and feedback as their primary method of instructional supervision. They also found that the principals' evaluation of instruction was primarily based on teacher performance and student achievement. Similarly, Hsieh and Huang (2021) conducted a study on the instructional supervision practices of school leaders in Taiwan. The authors found that the most used methods of instructional supervision were classroom observation and teacher meetings. They also found that the school leaders' evaluation of instruction was based on a range of factors, including lesson planning, teaching strategies, and student achievement. A study by Taşdemir and Çelikten (2020) focused on the instructional supervision practices of primary school principals in Turkey. The authors found that most of the principals used classroom observation as their primary method of instructional supervision. They also found that the principals' evaluation of instruction was primarily based on teacher performance and student achievement. In summary, recent studies suggest that the instructional supervision practices of school heads vary in terms of the level of supervision and evaluation of instruction. The most used methods of instructional supervision include classroom observation, teacher meetings, and feedback. The evaluation of instruction is typically

based on various factors, including teacher performance and student achievement. Further research is needed to determine the most effective instructional supervision practices for improving school teaching and learning outcomes. Indicated in Table 2 is the extent of instructional supervision practices of school heads to teachers in terms of monitoring students' progress. The result is focused on the highest and lowest mean ratings of indicators which are as follows: Manage practices and enable teaching and learning environment leading to students' academic achievement (2.24); Facilitate quality instructional delivery that offers rich learning opportunities for students to academically perform well (2.22); provide effective instructional leadership practices to facilitate the teaching and learning process (2.21), Enhance conditions of schooling and output measures; mostly academic achievement of students (2.21), and Ensure quality and timely instructional delivery to facilitate school effectiveness (2.20), suggest extent of instructional supervision practices of school heads to teachers in terms of monitoring students' progress are rarely manifested. The overall mean rating of 2.21 denotes less extensive instructional supervision practices of school heads to teachers regarding monitoring students' progress.

Progress monitoring can give the child's teacher information that can help the child learn more and learn faster and help the child's teachers teach more effectively and make better decisions about the type of instruction that will work best with the child. The term "progress monitoring" means that a teacher measures student performance. Progress monitoring happens daily for students through quizzes, standardized tests, homework assignments, group work, and projects (Suriagiri et al., 2022). Progress monitoring is an essential element of effectively

implementing individualized behavior support. Behavioral progress monitoring allows student support teams to evaluate the effectiveness of interventions and the fidelity of plan implementation. Conley et al. (2019) provided recommendations and guiding questions for student support teams to build progress monitoring structures and routines across the areas of outcome and fidelity measures, implementation, and decision systems. Chen and Lee (2021) conducted a study on the instructional supervision practices of high school principals in Taiwan. The

Table 2. Extent of Instructional Supervision Practices of School Heads in Terms of Monitoring Students' Progress

No	Monitoring Students' Progress	Mean	Descriptive Equivalent
1	Facilitate quality instructional delivery that offers rich learning opportunities for students to academically perform well	2.22	Less Extensive
2	Manage practices and enabling teaching and learning environment leading to students' academic achievement	2.24	Less Extensive
3	Provide effective instructional leadership practices to facilitate the teaching and learning process	2.21	Less Extensive
4	Ensure quality and timely instructional delivery to facilitate school effectiveness through supervision and time management	2.20	Less Extensive
5	Enhance conditions of schooling and output measures, mostly academic achievement of students	2.21	Less Extensive
<b>Overall Mean</b>		<b>2.21</b>	<b>Less Extensive</b>

authors found that the majority of the principals used student achievement data as their primary method of monitoring students' progress. They also found that the principals provided regular feedback to teachers on student performance and used the data to identify areas for improvement in instructional practices. Similarly, Quist and Koomson (2021) conducted a study on the instructional supervision practices of headteachers in Ghana. The authors found that the headteachers used a range of methods to monitor students' progress, including classroom observation, testing, and record-keeping. They also found that the headteachers used the data to identify struggling students and provide them with targeted support. A study by Chidavaenzi and Ndlovu (2020) focused on the instructional supervision practices of school heads in Zimbabwe. The authors found that the school heads used a combination of student performance data and classroom observation to monitor students' progress. They also found that the school heads used the data to provide tar-

geted support to struggling students and to identify areas for improvement in instructional practices. In summary, recent studies suggest that the instructional supervision practices of school heads in terms of monitoring students' progress vary. However, student achievement data is commonly used to monitor students' progress and identify areas for improvement in instructional practices. Other methods include classroom observation, testing, and record-keeping. The data obtained from these methods is used to provide targeted support to struggling students and identify improvement areas in instructional practices. Indicated in Table 3 is the extent of instructional supervision practices of school heads to teachers in terms of protection of instructional time. The result is focused on the highest and lowest mean ratings of indicators which are as follows: Manifest skill in ensuring effective use of time is very imperative for the attainment of school goals (2.26); Ensure that instructional time is not interrupted by other school activities which are not related to the

instructional process (2.25); Determine priority and scheduling of activities and minimizing time wasters (2.22); Set deadline, prioritizing school activities and ensuring appropriate delegation of instructional tasks to teachers are instructional time management practices that enhance timely coverage of scheme of work and maintaining of focus on instructional tasks (2.22); and Exhibit ability to produce and follow a schedule, meet deadlines, prioritize, and minimize distractions and unimportant tasks (2.21), suggest extent of instructional supervision practices of school heads to teachers in terms of protection of instructional time are rarely manifested. The overall mean rating of 2.23 denotes less extensive instructional supervision practices of school heads to teachers regarding the protection of instructional time.

Table 3. Extent of Instructional Supervision Practices of School Heads in Terms of Protection of Instructional Time

No	Protection of Instructional Time	Mean	Descriptive Equivalent
1	Exhibit ability to produce and follow a schedule, meet deadlines, prioritize, and minimize distractions and unimportant tasks	2.21	Less Extensive
2	Ensure that instructional time is not interrupted by other school activities which are not related to the instructional process	2.25	Less Extensive
3	Determine priority and scheduling of activities and minimize time wasters	2.22	Less Extensive
4	Set deadlines, prioritizing school activities, and ensuring appropriate delegation of instructional tasks to teachers are instructional time management practices that enhance timely coverage of the scheme of work and maintain focus on instructional tasks	2.22	Less Extensive
5	Manifest skill in ensuring effective use of time is very imperative for the attainment of school goals	2.26	Less Extensive
<b>Overall Mean</b>		<b>2.23</b>	<b>Less Extensive</b>

Instruction time is the “amount of time during which students receive instruction from a classroom teacher in a school” (UNESCO, 2021). Instructional time means that a portion of a school day is devoted to the teaching-learning process, not including extra-curricular activities, lunchtime, or recess. The study revealed that misuse of instructional time hurts the academic performance of students. The study’s findings were also established. Where there are high prevalence rates of childbirth leave, sick leave, absenteeism, and lateness, maximum usage of instructional time is hindered. School leaders can increase instructional time by observing teachers during instruction, developing, and consistently enforcing teacher and student attendance policies, having regularly scheduled visits from inspectors, and improving school commitment through an incentives system. Quality education depends in part on having sufficient

time for teaching and learning. Schools need adequate days and hours for instruction and well-trained teachers to deliver quality lessons so that student engagement and learning are maximized. Teachers need to take measures to manage time for an effective classroom environment properly. By working through teacher time management strategies, it is possible to keep up with the educational needs of every student, manage urgent situations immediately, and avoid falling behind when unexpected events occur. Instructional time does not include holidays or teacher professional development days when learners are not expected to be in school, breaks during the school day, or time spent on learning outside of school such as homework and tutoring. A study by Lashway and Smith (2020) examined the instructional supervision practices of principals in the United States. The authors found that most principals reported protecting instructional time as an essential aspect of their role. They used various strategies, such as scheduling regular professional development sessions outside instructional time and monitoring the use of technology in the classroom to ensure that it did not interfere with instructional time. In a similar study, Taylor, and Rice (2021) investigated the instructional supervision practices of headteachers in England. The authors found that headteachers used various strategies to protect instructional time, including implementing clear policies on mobile phones and other electronic devices and monitoring the length and frequency of meetings to ensure that they did not interfere with instructional time. Further-

more, a study by Hamid and Mohamad (2021) focused on the instructional supervision practices of school heads in Malaysia. The authors found that the school heads protected instructional time by scheduling regular staff meetings outside of instructional time and using technology to manage administrative tasks more efficiently. In conclusion, recent studies indicate that the instructional supervision practices of school heads in terms of protecting instructional time are essential. The strategies used to protect instructional time vary, but they often include scheduling professional development and staff meetings outside of instructional time, implementing clear policies on using electronic devices, and monitoring the length and frequency of meetings. Indicated in Table 4 is the extent of instructional supervision practices of school heads to teachers in terms of maintaining visibility. The result is focused on the highest and lowest mean ratings of indicators, which are as follows: Monitor staff participation during meetings (2.22); Monitor school compliance based on schedules (2.22); Provide timely information to teachers to enhance teaching roles (2.22); Ensure faculty truancy level to foster dedication to their duties (2.21), and Ensure appropriate delegation of instructional tasks to teachers for timely delivery (2.21), suggest extent of instructional supervision practices of school heads to teachers in terms of maintaining visibility are rarely manifested. The overall mean rating of 2.22 denotes less extensive instructional supervision practices of school heads to teachers regarding maintaining visibility.

Visibility will provide students with acceptance and security at school daily. Teachers will share their passion for teaching, celebrate student accomplishments, and seek support and advice for teaching difficulties. Parents will feel confident in the school's leader. When people can see something represented, they are better

able to understand and grasp who those people are, and this creates an important shift in the social consciousness to include people from a range of different backgrounds. A study conducted by Cawthon and Whittington (2020) examined the instructional supervision practices of school heads in the United States. The au-

Table 4. Extent of Instructional Supervision Practices of School Heads in Terms of Maintaining Visibility

No	Maintaining Visibility	Mean	Descriptive Equivalent
1	Ensure faculty truancy level to foster dedication to their duties	2.21	Less Extensive
2	Monitors staff participation during meetings	2.22	Less Extensive
3	Monitor school compliance based on schedules	2.22	Less Extensive
4	Provide timely information to teachers to enhance teaching roles	2.22	Less Extensive
5	Ensure appropriate delegation of instructional tasks to teachers for timely delivery	2.21	Less Extensive
<b>Overall Mean</b>		<b>2.21</b>	<b>Less Extensive</b>

thors found that maintaining visibility was essential to the school heads' role. They used various strategies, such as regularly visiting classrooms, interacting with students and teachers, and attending school events to maintain visibility. In a similar study, Ali and Al-Swidi (2021) investigated the instructional supervision practices of school heads in Saudi Arabia. The authors found that school heads used various strategies to maintain visibility, including regularly visiting classrooms, providing feedback to teachers, and attending school events. Furthermore, a study by Gao and Wang (2021) focused on the instructional supervision practices of school heads in China. The authors found that maintaining visibility was a crucial aspect of the school heads' role, and they used various strategies to achieve this, such as regularly visiting classrooms, interacting with students and teachers, and attending school events. In conclusion, recent studies indicate that maintaining visibility is an essential aspect of the instructional supervision practices of school heads. The strategies used to maintain visibility vary, but they often include regularly visiting class-

rooms, interacting with students and teachers, and attending school events. Table 5 presents the summary of the extent of instructional supervision practices of school heads to teachers in terms of its indicators, namely supervision and evaluation of instruction, monitoring students' progress, protection of instructional time, and maintaining visibility. The result is focused on the mean ratings of indicators, which are as follows: Protection of Instructional Time (2.23); Monitoring Students' Progress (2.21); Maintaining Visibility (2.21), and Supervision and Evaluation of Instruction (2.20), the extent of instructional supervision practices of school heads is always manifested, thus, very extensive in the extent of instructional supervision practices of school heads in Governor Generoso South, Davao Oriental Schools Division. The extent of instructional supervision practices of school heads can be viewed as a combination of various components, including supervision and evaluation of instruction, monitoring of student progress, protection of instructional time, and maintaining visibility.



Table 5. Summary of the Extent of Instructional Supervision Practices of School Heads

No	Extent of Teachers' Creativity	Mean	Descriptive Equivalent
1	Supervision and Evaluation of Instruction	2.20	Less Extensive
2	Monitoring Students' Progress	2.21	Less Extensive
3	Protection of Instructional Time	2.23	Less Extensive
4	Maintaining Visibility	2.21	Less Extensive
Overall Mean		2.21	Less Extensive

A study by Harris et al. (2020) examined the relationship between supervision, evaluation, and monitoring of student progress. The authors found that school heads who effectively supervised and evaluated instruction were likelier to monitor student progress and provide targeted support to teachers and students. Gallego et al. (2020) explored the association between protecting instructional time and maintaining visibility in a study. The authors found that school heads who protected instructional time were more likely to maintain visibility by regularly visiting classrooms and attending school events. They noted that this increased visibility allowed school heads to identify and address instructional issues in a timely and effective manner. Furthermore, a study by Yang and Ma (2020) explored the association between supervision and evaluation of instruction, monitoring of student progress, and maintaining visibility. The authors found that school heads who effectively supervised and evaluated instruction were more likely to monitor student progress and maintain visibility by regularly visiting classrooms and interacting with teachers and students. In conclusion, recent studies suggest that the extent of instructional supervision practices of school heads is a combination of various components, including supervision and evaluation of instruction, monitoring of student progress, protection of instructional time, and maintaining visibility. These components are interconnected, and effective instructional supervision requires the

integration of all four components.

3.2. *Extent of Teachers' Creativity*—Creativity is a cluster of skills that are needed to produce ideas that are both original and valuable (Sternberg, 2001), and Teaching Creatively has been defined as 'teachers using imaginative approaches to make learning more interesting, exciting and effective' (NACCCE, 1999). This includes explorative, innovative, and strategic approaches. Teacher creativity is needed to encourage the improvement of the quality of school graduates so that, in the end, it will accelerate the achievement of national education goals in Indonesia. Rais and Bibin (2020) aimed to find strategies and ways to increase teacher creativity to be used as input and recommendations for related parties, namely teachers, school principals, and the office of the Ministry of religion. The results of quantitative research found that transformational leadership that emphasizes idealized influence, intellectual stimulation, inspirational motivation, instructional support, individual consideration, and the influence of ethical values can increase teacher creativity. Teamwork that emphasizes group goals, active participation of members, prioritizing togetherness, communicating with each other, complementing each other, and sharing can improve the quality of teacher services. Work engagement that emphasizes active participation in work, competence, importance of work, development opportunities, level of performance, and interest in organizational goals can improve the quality

of teacher services. Abdula-Zade et al. (2021) conducted an empirical study of the influence of professional creativity on the effectiveness of a teacher’s professional activity. Attention is paid to the importance of creativity in the activities of a teacher. Based on an analysis of current literary sources, the phenomenon of the professional creativity of a teacher is highlighted, a definition of this concept is given, and its structure and components are considered. The results of the study allow us to conclude that there is a strong relationship between the professional creativity of a teacher and the effectiveness of professional performance, which is confirmed by the statistical processing of the data obtained. Indicated in Table 6 is the extent of the teachers’ creativity in terms of being explorative. The result is focused on the highest and lowest mean ratings of indicators, which are as follows: Encourages students to investigate their approaches to

learning the material (2.62); Introduces a lot of humor by having the students come up with their names for the numbers (2.62); Emphasizes group goals, active participation of members, prioritizing togetherness, communicating with each other, complementing each other, and sharing can improve the quality of teacher services (2.62); Creates their paths, instead of following others (2.21) and Encourages the learner to explore and experiment to uncover relationships (2.21), suggest the extent of teachers’ creativity in terms of being explorative are sometimes manifested. The overall mean rating of 2.61 denotes moderately extensive teachers’ creativity in terms of being explorative. Teacher creativity plays a critical role in enhancing students’ learning experiences. Teachers need to be creative in their teaching approach to make the learning process engaging and meaningful for students.

Table 6. Extent of Teachers’ Creativity in Terms of Exploration

No	Exploration	Mean	Descriptive Equivalent
1	Encourages students to investigate their own approaches to learning the material	2.62	Moderately Extensive
2	Creates their own paths instead of following others	2.61	Moderately Extensive
3	Introduces humor by having students come up with their own names for numbers	2.62	Moderately Extensive
4	Encourages learners to explore and experiment to uncover relationships	2.61	Moderately Extensive
5	Emphasizes group goals, active participation, togetherness, communication, complementing, and sharing	2.62	Moderately Extensive
Overall Mean		2.61	Moderately Extensive

An approach to teaching and training that encourages the learner to explore and experiment to uncover relationships, with much less of a focus on didactic training (teaching students by lecturing them). Exploratory Teaching Groups (ETGs) provide faculty and instructors a collaborative framework to explore and discuss ideas, issues, and challenges in their teaching, with the aim of developing new practices, resources, or other educational interventions. In exploratory instruction, you teach by planting questions, like seeds, which encourage students to investigate their own approaches to learning the material. Exploring is a dimension of teacher creativity that involves teachers engag-

ing in inquiry-based activities to enhance their own knowledge and understanding of their subject areas. In a study by Yang and Liu (2020), the authors explored the relationship between teacher creativity and teacher learning. The authors found that teacher creativity was positively related to teacher learning, particularly in exploring. The authors suggested that teachers who engage in exploring tend to be more innovative and better able to adapt to changes in the educational environment. Similarly, in a study by Ma and Yang (2020), the authors explored the relationship between teacher creativity and teacher professional development. The authors found that exploring was an important dimen-

sion of teacher creativity, which played a critical role in teacher professional development. They argued that exploring allows teachers to discover new teaching methods and strategies, which they can then implement in their teaching practices. In addition, exploring can also enhance student learning outcomes. In a study by Kim et al. (2021), the authors explored the impact of teacher creativity on student academic achievement. The authors found that teacher creativity, particularly in exploring, was positively associated with student academic achievement. They suggested that teachers who engage in exploring tend to create more engaging and meaningful learning experiences, which in turn enhance student learning outcomes. Indicated in Table 7 is the extent of the teachers' creativity in terms of being innovative. The result is focused on the highest and lowest mean ratings of indicators which are as follows: Introduces new

teaching strategies and methods into the classroom (2.24); Introduces Inquiry-based learning develops thinking and critical thinking skills. Instead of driving the class through a lecture-style format, the teacher poses questions, scenarios, and problems (2.24); Facilitates personalized learning which provides a catered learning experience and methods that are optimized for individual students (2.23); Uses Project-based learning is an active method of learning where students gain mastery through the application of their knowledge rather than rote memorization (2.22); and Uses jigsaws introduce the opportunity for students to teach other students (2.22), suggest extent of teachers' creativity in terms of being innovative are rarely manifested. The overall mean rating of 2.23 denotes less extensive teachers' creativity in terms of being innovative.

Table 7. The Extent of Teachers' Creativity in Terms of Innovation

No	Innovation	Mean	Descriptive Equivalent
1	Introduces new teaching strategies and methods into the classroom	2.24	Less Extensive
2	Facilitates personalized learning, which provides a catered learning experience methods that are optimized for individual students	2.23	Less Extensive
3	Uses Project-based learning, an active method where students gain mastery through application of their knowledge rather than rote memorization	2.22	Less Extensive
4	Introduces Inquiry-based learning and develops thinking and critical thinking skills	2.24	Less Extensive
5	Instead of driving the class through a lecture-style format, the teacher poses questions, scenarios, and problems Uses jigsaws to introduce the opportunity for students to teach other students	2.22	Less Extensive
Overall Mean		2.23	Less Extensive

Innovation is a critical component of teacher creativity, and it allows teachers to adapt to changes in the educational environment and create engaging and meaningful learning experiences for their students. Recent studies have examined the concept of teacher creativity in terms of innovation and explored its different dimensions. Innovation is an essential dimension of teacher creativity that involves teachers developing new and effective teaching methods and strategies to improve student learning outcomes. In a study by Wang et al. (2020), the authors explored the impact of teacher inno-

vation on student academic achievement. The authors found that teacher innovation was positively associated with student academic achievement, particularly in the areas of mathematics and science. The authors suggested that innovative teachers tend to create more engaging and interactive learning experiences for their students, which enhance student learning outcomes. Similarly, in a study by Lee et al. (2021), the authors explored the impact of teacher innovation on student engagement. The authors found that teacher innovation was positively associated with student engagement, particularly

in the areas of social studies and language arts. The authors suggested that innovative teachers tend to create more interesting and challenging learning experiences, which in turn, enhance student engagement and motivation. In addition, teacher innovation can also enhance teacher professional development. In a study by Liu et al. (2021), the authors explored the relationship between teacher innovation and teacher professional development. The authors found that teacher innovation was positively associated with teacher professional development, particularly in the areas of teaching skills and knowledge. They argued that innovative teachers tend to be more open-minded and receptive to new teaching methods and strategies, which in turn enhance their professional development. In conclusion, innovation is a critical dimension of teacher creativity that plays a vital role in enhancing student learning outcomes, engagement, and motivation. Recent studies suggest that innovative teachers tend to create more engaging and interactive learning experiences for their students, which in turn enhance student academic achievement. They also tend to be more receptive to new teaching methods and strategies, which enhance their professional development. Thus, innovation should be encouraged as a critical component of teacher creativity in the classroom. Indicated in Ta-

ble 8 is the extent of the teachers' creativity in terms of strategic approaches. The result is focused on the highest and lowest mean ratings of indicators which are as follows: Helps learners participate, connect, and add excitement to the content being delivered (2.81); The delegating style promotes learning through empowerment (2.72); Experiential learning encourages creativity, helps students learn from mistakes, fosters reflective thinking, and prepares students for future experiences (2.70), The discussing style promotes learning through interaction (2.63) and The directing style promotes learning through listening and following directions (2.62), suggest extent of teachers' creativity in terms of strategic approaches are sometimes manifested. The overall mean rating of 2.69 denotes moderately extensive teachers' creativity in terms of strategic approaches. Being strategic is a critical component of teacher creativity, and it allows teachers to plan and implement effective instructional strategies to improve student learning outcomes. Recent studies have examined the concept of teacher creativity in terms of strategic approaches and explored its different dimensions. Strategic approaches to teacher creativity involve teachers creating, adapting, and implementing effective instructional strategies to meet the needs of their students.

Table 8. Extent of Teachers' Creativity in Terms of Strategic Approach

No	Strategic Approach	Mean	Descriptive Equivalent
1	The directing style promotes learning through listening and following directions	2.62	Moderately Extensive
2	The discussing style promotes learning through interaction	2.63	Moderately Extensive
3	The delegating style promotes learning through empowerment	2.72	Moderately Extensive
4	Helps learners participate, connect, and add excitement to content delivery	2.81	Moderately Extensive
5	Experiential learning encourages creativity, learning from mistakes, reflective thinking, and prepares for future experiences	2.70	Moderately Extensive
Overall Mean		2.69	Moderately Extensive

Teaching approaches have been shown to be an important aspect of teaching in school or higher education. Although different approaches to teaching may play a role in the outcome of professional training, they have not

yet been further studied in this context. It is first necessary to determine whether the existing approaches to teaching construct can be transferred to the context of professional training and how approaches to teaching can be opera-

tionalized for future studies. Results show that the construct can be transferred to professional training. However, to apply the approaches to teaching construct to professional training, some of the underlying categories must be modified. Furthermore, we discuss the need to include new aspects, such as the category of transfer. Implications for further research are presented, including the development of a measurement instrument based on the results (Bones and Hochholding, 2020). In a study by Chen and Yang (2020), the authors explored the relationship between teacher creativity and strategic thinking. The authors found that teacher creativity was positively associated with strategic thinking, particularly in terms of instructional planning and implementation. They suggested that creative teachers tend to be more proactive in planning and implementing instructional strategies that align with their student's needs and interests. Similarly, in a study by Binh et al. (2021), the authors explored the impact of teacher strategic approaches on student learning outcomes. The authors found that teachers who used strategic approaches in their instruction tended to have higher student learning outcomes compared to teachers who did not. They argued that teachers who use strategic approaches tend to be more effective in adapting their instruction to meet the diverse needs of their students. In addition, teacher strategic approaches can also enhance teacher collaboration

and teamwork. In a study by Gao et al. (2021), the authors explored the relationship between teacher strategic approaches and teacher collaboration. The authors found that teachers who used strategic approaches tended to collaborate more effectively with their colleagues, particularly in terms of sharing instructional strategies and resources. They argued that teachers who use strategic approaches tend to be more open-minded and receptive to feedback, which enhances their ability to collaborate effectively. In conclusion, being strategic is a critical component of teacher creativity that plays a vital role in enhancing student learning outcomes and teacher collaboration. Recent studies suggest that teachers who use strategic approaches tend to be more effective in planning and implementing instructional strategies that align with their student's needs and interests. They also tend to collaborate more effectively with their colleagues, which enhances their ability to share instructional strategies and resources. Thus, being strategic should be encouraged as a critical component of teacher creativity in the classroom. Table 9 summarizes teachers' creativity in terms of its indicators, namely exploration, innovation, and strategic approaches. The result is focused on the mean ratings of indicators, which are as follows: strategic approaches (2.69), explorative (2.61), and denotes moderately extensive, and Innovative (2.23) suggests less extensive.

Table 9. Summary of the Extent of Teachers' Creativity

No	Coordination with Parents	Mean	Descriptive Equivalent
1	Explorative	2.61	Moderately Extensive
2	Innovative	2.23	Less Extensive
3	Strategic Approaches	2.69	Moderately Extensive
Overall Mean		2.64	Moderately Extensive

Teacher creativity is a vital aspect of effective teaching that helps to improve student learning outcomes. Recent studies have explored the different components of teacher creativity, including exploration, innovation, and strategic approaches. Exploration is an essential component of teacher creativity that involves teachers actively seeking out new ideas and approaches to instruction. In a study by Chen and Yang (2020), the authors found that exploration was positively associated with teacher creativity, particularly in terms of teachers' ability to generate new ideas and solutions to instructional challenges. The authors suggested that teachers who engage in exploration tend to be more open-minded, curious, and reflective in their instructional practices, which enhances their ability to generate innovative instructional strategies. Innovation is another critical component of teacher creativity that involves teachers creating or adapting effective instructional strategies to meet the diverse needs of their students. In a study by Cao et al. (2020), the authors explored the relationship between teacher innovation and student learning outcomes. The authors found that teachers who used innovative instructional strategies tended to have higher student learning outcomes compared to teachers who did not. They argued that innovative teachers tend to be more flexible and adaptable, which enhances their ability to meet the diverse needs of their students. Strategic approaches are also a critical component of teacher creativity that involves teachers planning and implementing effective instructional strategies to achieve specific learning outcomes. In a study by Binh et al. (2021), the authors found that teacher strategic approaches were positively associated with

The significance of instructional supervision practices in enhancing teachers' creativity has been an area of interest in education research. Instructional supervision practices refer to the

student learning outcomes. They argued that teachers who use strategic approaches tend to be more effective in adapting their instruction to meet the diverse needs of their students. In conclusion, exploration, innovation, and strategic approaches are essential components of teacher creativity that enhance student learning outcomes. Recent studies suggest that teachers who engage in exploration tend to be more open-minded, curious, and reflective in their instructional practices, which enhances their ability to generate innovative instructional strategies. Similarly, teachers who use innovative instructional strategies tend to be more flexible and adaptable, which enhances their ability to meet the diverse needs of their students. Furthermore, teachers who use strategic approaches tend to be more effective in planning and implementing effective instructional strategies to achieve specific learning outcomes. Thus, exploring, innovating, and being strategic should be encouraged as critical components of teacher creativity in the classroom.

*3.3. Significant Relationship Between Instructional Supervision Practices and Teachers' Creativity*—It can be depicted that Pearson's Correlation generated a significant correlation between instructional supervision practices ( $r=0.884$ ;  $p<.002$ ) and teachers' creativity. Table 10 revealed the yielded results of the significant relationship between instructional supervision practices and teachers' creativity. It provides information that the posed null hypothesis stating that there is no significant correlation between instructional supervision practices and teachers' creativity must be rejected for the results provided empirical evidence of significant results.

various strategies that supervisors use to evaluate, guide, and support teachers' professional growth in teaching practices. Creativity, on the other hand, refers to the ability to generate new

Table 10. Significant Relationship Between Instructional Supervision Practices and Teachers' Creativity

Variables	Instructional Supervision Practices			
	r-value	p-value	Interpretation	Decision
Teachers' Creativity	0.884	<0.002	Significant	Reject $H_0$

*\*significant @p<0.05.*

ideas, concepts, or solutions that are original and valuable. Several authors have researched the relationship between instructional supervision practices and teachers' creativity. In their study, Mokhtar et al. (2020) investigated the impact of instructional supervision practices on teachers' creativity in Malaysian schools. The authors employed a quantitative research design to collect data from 400 teachers using a questionnaire. The study findings indicated that instructional supervision practices, such as providing feedback, mentoring, and coaching, positively influenced teachers' creativity in developing innovative teaching strategies. Similarly, in a study conducted in Pakistan, Riaz et al. (2021) examined the role of instructional supervision practices in enhancing teachers' creativity. The study involved 220 teachers who completed a self-report questionnaire on instructional supervision practices and creativity. The results indicated that instructional supervision practices, such as observation, feedback, and reflection, positively impacted teachers' creativity, leading to the development of innovative teaching practices. Another study conducted by Solano and Othman (2022) in the Philippines explored the relationship between instructional supervision practices and teachers' creativity. The authors used a mixed-methods approach to collect data from 200 teachers and 10 supervisors through questionnaires, interviews, and observations. The study findings revealed that instructional supervision practices, such as providing support, feedback, and professional development opportunities, significantly influenced teachers' creativity, leading to innovative teaching practices.

Furthermore, a study by Zhang et al. (2020) in China investigated the impact of instructional supervision practices on teachers' creativity in secondary schools. The authors collected data from 300 teachers using a self-report questionnaire. The findings indicated that instructional supervision practices, such as collaborative supervision and providing professional development opportunities, positively influenced teachers' creativity in developing innovative teaching strategies. In conclusion, the significant relationship between instructional supervision practices and teachers' creativity is evident in various international studies. The findings indicate that instructional supervision practices, such as providing feedback, mentoring, coaching, observation, reflection, support, and professional development opportunities, positively impact teachers' creativity, leading to innovative teaching practices. Therefore, school administrators and supervisors must adopt effective instructional supervision practices to enhance teachers' creativity and improve the quality of education. Several authors have conducted research in the Philippines on the relationship between instructional supervision practices and teachers' creativity. One such study was conducted by Solano and Othman (2022), which aimed to explore the relationship between instructional supervision practices and teachers' creativity. The authors used a mixed-methods approach to collect data from 200 teachers and 10 supervisors through questionnaires, interviews, and observations. The study findings revealed that instructional supervision practices, such as providing support, feedback, and profes-

sional development opportunities, significantly influenced teachers' creativity, leading to the development of innovative teaching practices. Another study conducted by Bueno and Belonio (2021) examined the effect of instructional supervision on teachers' creativity in a private school setting. The study involved 40 teachers who completed a self-report questionnaire on instructional supervision practices and creativity. The results indicated that instructional supervision practices, such as feedback, coaching, and mentoring, positively impacted teachers' creativity, leading to innovative teaching practices. Similarly, in a study conducted by Barilea and Dela Cruz (2020), the authors investigated the impact of instructional supervision practices on teachers' creativity in a public-school setting. The study involved 80 teachers who completed a self-report questionnaire on instructional supervision practices and creativity. The results indicated that instructional supervision practices, such as observation, feedback, and reflection, positively impacted teachers' creativity, leading to the development of innovative teaching practices. Furthermore, in a study conducted by Olegario and Buenaobra (2021), the authors explored the relationship between instructional supervision practices and teachers' creativity in a higher education setting. The study involved 100 faculty members who completed a self-report questionnaire on instructional supervision practices and creativity. The findings indicated that instructional supervision practices, such as providing support and feedback, positively influenced teachers' creativity in developing innovative teaching strategies. In conclusion, the significant relationship between instructional supervision practices and teachers' creativity is evident in various stud-

Instructional supervision is an essential aspect of the educational process that aims to improve the quality of teaching and learning. The

ies conducted in the Philippine setting. The findings indicate that instructional supervision practices, such as providing support, feedback, coaching, mentoring, observation, and reflection, positively impact teachers' creativity, leading to the development of innovative teaching practices. Therefore, school administrators and supervisors must adopt effective instructional supervision practices to enhance teachers' creativity and improve the quality of education.

*3.4. On the Indicators of the Instructional Supervision Practices Significantly Influence Teachers' Creativity*—Table 11 depicts the simple regression coefficient analysis on the significant influence of instructional supervision practices on the extent of teachers' creativity. All indicators of instructional supervision practices, including supervision and evaluation of instruction (0.002), monitoring students' progress (0.010), protection of instructional time (0.021), and maintaining visibility (0.001), indicate statistically significant influence on parental support. This shows that the extent of instructional supervision practices provides empirical evidence that directly influences teachers' creativity. Meanwhile, the R<sup>2</sup> value of 0.875 suggests that the indicators of instructional supervision practices explained 87.5 percent of the variance of teachers' creativity. This provides empirical evidence that the variability of teachers' creativity can be accounted for and explained by the indicators enumerated under the extent of instructional supervision practices. In addition, the F-value shows all the sums of squares, given regression being the model and Residual being the error. The F-value (205.685) and F-statistic are significant  $p < .001$ , which indicates that the model significantly predicts teachers' creativity.

role of instructional supervision includes supervising and evaluating instruction, monitoring students' progress, protecting instructional time,



Table 11. Regression Coefficient Analysis on Indicators of the Instructional Supervision Practices Significantly Influence Teachers' Creativity

Model	B	Beta	Standard Error	p-value	Decisions
H <sub>0</sub>					
(Intercept)	4.397		0.062	< .001	
H <sub>1</sub>					
(Intercept)	0.401		0.144	0.006	
Supervision and Evaluation of Instruction	0.032	-0.031	0.066	0.002	Reject H <sub>0</sub>
Monitoring Students' Progress	0.342	0.361	0.084	0.010	Reject H <sub>0</sub>
Protection of Instructional Time	0.207	0.215	0.094	0.021	Reject H <sub>0</sub>
Maintaining Visibility	0.398	0.415	0.089	0.001	Reject H <sub>0</sub>
R <sup>2</sup>	0.875				
F-value	205.685				
p-value	< 0.001				

\*Significant @ p<0.05

and maintaining visibility. These aspects significantly influence teachers' creativity and ability to develop innovative teaching practices. Supervision and evaluation of instruction are crucial aspects of instructional supervision that significantly influence teachers' creativity. A study by Salihu and Ahmad (2019) explored the impact of instructional supervision on teachers' creativity in public secondary schools in Nigeria. The study findings revealed that instructional supervision involving feedback, coaching, and mentoring significantly influences teachers' creativity and ability to develop innovative teaching practices. Monitoring students' progress is another critical aspect of instructional supervision influencing teachers' creativity. In a study by Santos, Gozalo, and Martinez (2020), the authors explored the impact of instructional supervision on teachers' creativity in primary schools in Spain. The study findings revealed that instructional supervision involving monitoring students' progress and providing feedback significantly influences teachers' creativity and ability to develop innovative teaching practices. Protection of instructional time is another critical aspect of instructional supervision influencing teachers' creativity. In a study by Tostao

and Mestre (2021), the authors explored the impact of instructional supervision on teachers' creativity in public schools in Portugal. The study findings revealed that instructional supervision that protects instructional time by reducing administrative tasks and providing adequate resources significantly influences teachers' creativity and ability to develop innovative teaching practices. Maintaining visibility is another critical aspect of instructional supervision influencing teachers' creativity. In a study by Tienken and Cooper (2022), the authors explored the impact of instructional supervision on teachers' creativity in public schools in the United States. The study findings revealed that instructional supervision that involves maintaining visibility through classroom observations, regular meetings, and providing professional development opportunities significantly influences teachers' creativity and their ability to develop innovative teaching practices. In conclusion, instructional supervision plays a significant role in improving the quality of teaching and learning in schools. The role of instructional supervision includes the supervision and evaluation of instruction, monitoring students' progress, protection of instructional time, and maintain-

ing visibility. These aspects significantly influence teachers' creativity and their ability to develop innovative teaching practices. Therefore, school administrators and instructional supervi-

sors should adopt effective instructional supervision practices that promote teachers' creativity and improve the quality of education.

#### 4. Conclusions and Recommendations

This chapter presents the findings, conclusion, and recommendation based on the results of the data analyzed, discussed, and drawn implications. Findings were based on the posed statement of the problem; conclusions were based on the findings generated, and recommendations were based on the implications of the discussions.

*4.1. Findings*—The following are the study's findings, which were given in the presentation, analysis, and discussions. The extent of instructional supervision practices of school heads to teachers in terms of protection of instructional time (2.23); monitoring students' progress (2.21); maintaining visibility (2.21), and supervision and evaluation of instruction (2.20), extent of instructional supervision practices of school heads is rarely manifested, thus, less extensive in the extent of instructional supervision practices of school heads in Governor Generoso south, Davao Oriental Schools Division. The teachers' creativity in terms of its indicators of strategic approaches (2.69), explorative (2.61), and moderately extensive and Innovative (2.23) suggests less extensive in Governor Generoso South, Davao Oriental Schools Division. Pearson's Correlation generated a significant correlation between instructional supervision practices ( $r=0.884$ ;  $p<.002$ ) and teachers' creativity. All indicators of instructional supervision practices, including supervision and evaluation of instruction (0.002), monitoring students' progress (0.010), protection of instructional time (0.021), and maintaining visibility (0.001), are statistically significant for teachers' creativity. This shows that the extent of instructional supervision practices provides empirical evidence that directly influences teachers' creativity.

*4.2. Conclusions*—Given the findings of the study presented, the following were the conclusions to wit; The extent of instructional supervision practices of school heads to teachers in terms of protection of instructional time, monitoring students' progress, maintaining visibility, and supervision and evaluation of instruction was rarely manifested; thus, less extensive instructional supervision practices of school heads in Governor Generoso South, Davao Oriental Schools Division. The teachers' creativity in terms of its indicators Innovative, explorative, and strategic approaches denote, moderately extensive, thus, sometimes manifested creativity in Governor Generoso South, Davao Oriental Schools Division. There was a significant correlation between instructional supervision practices and teachers' creativity. All indicators of instructional supervision practices, including supervision and evaluation of instruction, monitoring students' progress, protection of instructional time, and maintaining visibility, indicate statistical significance to teachers' creativity. This shows that the extent of instructional supervision practices provides empirical evidence that directs influences on teachers' creativity.

*4.3. Recommendations*—With the presented conclusions of the study, the following were recommendations to wit; Public School District Supervisors may look to other factors that contribute to continuously improving the implementation of instructional supervision

practices in supervision and evaluation of instruction, monitoring students' progress, protecting instructional time, and maintaining visibility. School heads may continuously explore to improve teachers' creativity in terms of its indicators of Innovative, explorative, and strategic approaches. Exploring other factors that may influence the implementation of an alternative delivery mode system could improve stakeholders' support in many other dimensions. Future research may include the school governing council in crafting school-based policy and parent support and involvement, along with other important indicators, which can help account for and explain the variability in the extent of instructional supervision practices in relation to teachers' creativity.

## 5. References

- Abdula-Zade, K. Z., Sergeeva, M. G., Lukashenko, D. V., & Solovieva, A. V. (2021). Professional creativity as a component of the effective activity of a teacher. *Journal of Educational Psychology - Propositos y Representaciones*, 9(Speciss 3), Article e1177. <https://eric.ed.gov/?q=teachers%27+creativity+&pg=2&id=EJ1300129>
- Al-Dababneh, K. A., & Al-Zboon, E. K. (2017). Can teachers' self-reported characteristics and beliefs about creativity predict their perception of their creativity practices in the classroom. *International Journal of Special Education*, 32(4), 723–745. <https://eric.ed.gov/?q=teachers%27+creativity+&pg=2&id=EJ1184189>
- Ali, A., & Al-Swidi, A. K. (2021). Instructional supervision practices of school heads in Saudi Arabia. *Journal of Education and Practice*, 12(13), 79–85.
- Apak, J., Taat, M. S., & Suki, N. M. (2021). Measuring teacher creativity-nurturing behavior and readiness for 21st century classroom management. *International Journal of Information and Communication Technology Education*, 17(3), Article 4, 52–67. <https://doi.org/10.4018/IJICTE.20210701.oa4>
- Arifani, Y., & Suryanti, S. (2019). The influence of male and female esp teachers' creativity toward learners' involvement. *International Journal of Instruction*, 12(1), 237–250. <https://eric.ed.gov/?q=teachers%27+creativity+&id=EJ1202151>
- Ashenafi, M. M., Ronchetti, M., & Riccardi, G. (2016). Predicting student progress from peer-assessment data. *Paper presented at the International Conference on Educational Data Mining (EDM) (9th, Raleigh, NC, Jun 29-Jul 2, 2016)*. <https://eric.ed.gov/?q=+Monitoring+Students%27+Progress&pg=5&id=ED592690>
- Barilea, R. L., & Dela Cruz, J. E. (2020). Impact of instructional supervision practices on teachers' creativity in a public school setting. *Journal of Education and Human Development*, 9(2), 47–56.
- Binh, P. T. T., Thao, N. T., Thanh, L. D., & Long, N. T. (2021). Enhancing teacher strategic approaches to promote student learning outcomes. *Education Sciences*, 11(4), 147.
- Bonnes, C., & Hochholdinger, S. (2020). Approaches to teaching in professional training: A qualitative study. *Vocations and Learning*, 13(3), 459–477. <http://dx.doi.org/10.1007/s12186-020-09244-2>
- Brew, A., Boud, D., Lucas, L., & Crawford, K. (2022). Hampering teaching excellence? academics making decisions in the face of contradictions. *Studies in Higher Education*, 47(4), 941–952. <http://dx.doi.org/10.1080/03075079.2020.1828327>

- Bueno, M. F. B., & Belonio, N. L. (2021). The effect of instructional supervision on teachers' creativity in a private school setting. *International Journal of Academic Research in Business and Social Sciences*, 11(11), 537–547.
- Caldarella, P., Larsen, R. A. A., Williams, L., Wehby, J. H., Wills, H. P., & Kamps, D. M. (2020). Monitoring academic and social skills in elementary school: A psychometric evaluation of the classroom performance survey. *Grantee Submission*. <https://eric.ed.gov/?q=+Monitoring+Students%27+Progress&pg=3&id=ED577150>
- Cao, Y., Zhang, Y., & Li, Y. (2020). The effects of innovative teaching on students' learning outcomes: A meta-analysis. *Journal of Educational Psychology*, 112(2), 366–385.
- Cawthon, S. W., & Whittington, M. S. (2020). Instructional supervision practices of school heads in the united states. *Journal of Educational Administration and Leadership*, 2(1), 1–10.
- Chappellear, T. C., & Price, T. (2012). Teachers' perceptions of high school principal's monitoring of student progress and the relationship to student achievement. *International Journal of Educational Leadership Preparation*, 7(2). <https://eric.ed.gov/?q=+Monitoring+Students%27+Progress&pg=2&id=EJ973796>
- Chen, C. H., & Yang, Y. T. (2020). Examining the relationships between teacher creativity, strategic thinking, and organizational learning in schools. *Frontiers in Psychology*, 11, 61.
- Chen, M.-H., & Lee, H.-W. (2021). Instructional supervision practices of high school principals in taiwan. *Journal of Educational Research and Evaluation*, 25(2), 123–142.
- Chidavaenzi, R., & Ndlovu, M. (2020). The instructional supervision practices of school heads in zimbabwe. *Journal of Educational Research and Evaluation*, 24(2), 319–336.
- Chou, C.-M., Shen, C.-H., Hsiao, H.-C., & Shen, T.-C. (2019). Factors influencing teachers' innovative teaching behaviour with information and communication technology (ict): The mediator role of organizational innovation climate. *Educational Psychology*, 39(1), 65–85. <https://doi.org/10.1080/01443410.2018.1520201>
- Conley, K. M., Everett, S. R., & Pinkelman, S. E. (2019). Strengthening progress monitoring procedures for individual student behavior. *Beyond Behavior*, 28(3), 124–133. <https://doi.org/10.1177/1074295619852333>
- Creswell, J. W., & Plano Clark, V. L. (2018). *Designing and conducting mixed methods research* (3rd). SAGE.
- Deniz, Ü., & Erdener, M. A. (2020). Levels of school administrators exhibiting instructional supervision behaviors: Teachers' perspectives. *Research in Educational Administration Leadership*, 5(4), 1038–1081. <https://eric.ed.gov/?q=instructional+supervision+practices&id=EJ1293428>
- Edmunds, J., Arshavsky, N., Coyle, V., Hutchins, B., Lewis, K., Williams, M., Rosof, L., Gicheva, D., & Henson, B. (2022). *Improving teachers' instruction: The impact of project equipd. final external evaluation report* (tech. rep.). SERVE Center at University of North Carolina at Greensboro. [https://eric.ed.gov/?q=Supervision+and+Evaluation+of+Instruction&ff1=dtySince\\_2022&id=ED618488](https://eric.ed.gov/?q=Supervision+and+Evaluation+of+Instruction&ff1=dtySince_2022&id=ED618488)
- Fitriah. (2018). The role of technology in teachers' creativity development in english teaching practices. *TEFLIN Journal: A publication on the teaching and learning of English*, 29(2), 177–193. <http://journal.teflin.org/index.php/journal/article/view/588>
- Focus, T. (n.d.). *An introduction to qualitative research* [31].

- Gallego, M. A., Sastre, V. A., & Domínguez, R. G. (2020). Instructional supervision practices and their relationship with the protection of instructional time and the maintenance of visibility. *Journal of Educational Leadership and Management*, 8(2), 36–45.
- Gao, F., Zhai, X., Yang, M., & Wang, M. (2021). A study on the relationship between teacher strategic approaches and teacher collaboration in elementary and middle schools. *Frontiers in Psychology*, 12, 644690.
- Gao, M., & Wang, M. (2021). Instructional supervision practices of school heads in china. *Journal of Educational Leadership and Management*, 9(2), 23–31.
- Guide to multivariate techniques by mertler* (tech. rep.). (n.d.).
- Gupta, M., & Verma, G. (2021). Teaching effectiveness of schoolteachers: A theoretical perspective. 9, a173–a179.
- Gustavsen, B. (2008). Action research, practical challenges, and the formation of theory. *Action Research*, 6(4), 421–437. <https://doi.org/10.1177/1476750308094130>
- Hamid, A. A., & Mohamad, M. (2021). Instructional supervision practices of school heads in malaysia. *International Journal of Educational Administration and Policy Studies*, 13(3), 16–26.
- Harris, J. P., Allsopp, D. H., & Lovett, B. J. (2020). The relationship between instructional supervision and monitoring student progress. *Educational Management Administration & Leadership*, 48(4), 619–636.
- Hazi, H. M. (2022). The restrictive concepts of teacher evaluation and their discourse communities. *Journal of Educational Supervision*, 5(1), 44–67. [https://eric.ed.gov/?q=Supervision+and+Evaluation+of+Instruction&ff1=dtSince\\_2022&id=EJ1351566](https://eric.ed.gov/?q=Supervision+and+Evaluation+of+Instruction&ff1=dtSince_2022&id=EJ1351566)
- Heaysman, O., & Tubin, D. (2019). Content teaching: Innovative and traditional practices. *Educational Studies*, 45(3), 342–356. <https://doi.org/10.1080/03055698.2018.1446334>
- Himmetoglu, B., Ayduğ, D., & Bayrak, C. (2022). Relationships among teachers’ perceptions on coworker social loafing, organizational justice, and task visibility. *International Journal of Educational Management*, 36(3), 247–260. <https://doi.org/10.1108/IJEM-04-2021-0158>
- Honig, M. I., & Rainey, L. R. (2019). Supporting principal supervisors: What really matters? *Journal of Educational Administration*, 57(5), 445–462. <https://doi.org/10.1108/JEA-05-2019-0089>
- Hsieh, H.-J., & Huang, C.-H. (2021). The instructional supervision practices of school leaders in taiwan. *Journal of Educational Research and Evaluation*, 25(1), 33–48.
- Kayode, O. O., Ogundokun, R. O., Mohammed, R. E., & Olorundare, A. S. (2020). Review of innovative teaching strategies in senior secondary schools sciences. *Journal of Educational Technology*, 17(1), 56–65. <https://imanagerpublications.com/article/17018/>
- Khan, I., Ahmad, A. R., Jabeur, N., & Mahdi, M. N. (2021). An artificial intelligence approach to monitor student performance and devise preventive measures. *Smart Learning Environments*, 8, Article 17. <https://doi.org/10.1186/s40561-021-00161-y>
- Khodabakhshzadeh, H., Hosseinnia, M., Moghadam, H. A., & Ahmadi, F. (2018). Efl teachers’ creativity and their teaching’s effectiveness: A structural equation modelling approach. *International Journal of Instruction*, 11(1), 227–238. <https://eric.ed.gov/?q=teachers%27+creativity+&id=EJ1165219>

- Kim, H. J., Yoo, J. H., Kim, J. E., & Bae, S. H. (2021). The relationship between teacher creativity and student academic achievement: The mediating role of student engagement. *Asia Pacific Education Review*, 22(1), 135–144.
- Korumaz, M., Kiliç, G. N., & Kocabas, I. (2020). The lived experience of principals for managing change in their schools: A phenomenological research. *International Online Journal of Education and Teaching*, 8(2), 1038–1062. <https://eric.ed.gov/?q=managing+visibility+in+school+&pg=2&id=EJ1294308>
- Koskinen, R., & Pitkäniemi, H. (2022). Meaningful learning in mathematics: A research synthesis of teaching approaches. *International Electronic Journal of Mathematics Education*, 17(2), Article em0679. <https://eric.ed.gov/?q=strategic+approaches+in+teaching+&id=EJ1336141>
- Krivova, A. L., Kalliopin, A. K., Korotaeva, I. E., Shafazhinskaya, N. E., & Ermilova, D. Y. (2021). Social networks as a means of monitoring students' progress. *Journal of Educational Psychology - Propósitos y Representaciones*, 9(speciss 3), Article e1264. <https://eric.ed.gov/?q=+Monitoring+Students%27+Progress&id=EJ1301353>
- Lashway, L., & Smith, C. (2020). Instructional supervision practices of principals in the united states. *Journal of Educational Administration and Leadership*, 2(2), 1–12.
- Lee, Y. K., Kim, H. J., Lee, H. W., & Kim, K. Y. (2021). The relationship between teacher innovation and student engagement: Focusing on the mediating effect of teaching effectiveness. *Sustainability*, 13(3), 1388.
- Lingam, G. I., Lingam, N., & Singh, S. K. (2021). Instructional leadership practices: Teachers perceptions of a rural school principal in fiji. *Australian Journal of Teacher Education*, 46(6), Article 2, 20–35. <https://eric.ed.gov/?q=+protecting+instructional+time&ff1=dtySince.2014&id=EJ1309365>
- Liu, S., Chen, J., & Chen, X. (2021). An empirical study of the relationship between teacher innovation and teacher professional development. *Frontiers in Psychology*, 12, 640758.
- Lustrea, A., & Crasovan, M. (2017). The educational team – an alternative solution for romanian secondary education? *Journal of Educational Sciences*, 18(1(35)), 26–37. <https://eric.ed.gov/?q=+Monitoring+Students%27+Progress&pg=2&id=EJ1260372>
- Ma, Y., & Yang, L. (2020). An empirical study on the relationship among teacher creativity, teacher professional development and teacher self-efficacy. *Journal of Education and Practice*, 11(2), 35–46.
- Mansor, A. N., Hamid, A. H. A., Medina, N. I., Vikaraman, S. S., Wahab, J. L. A., Nor, M. Y. M., & Alias, B. S. (2022). Challenges and strategies in managing small schools: A case study in perak, malaysia. *Educational Management Administration Leadership*, 50(4), 694–710. <https://doi.org/10.1177/1741143220942517>
- Maranatha, S., & Widodo, A. (2021). Instructional supervision practices of school principals in indonesia. *Journal of Educational Research and Evaluation*, 25(2), 177–196.
- Massie, M.-H., Puozzo, I. C., & Boutet, M. (2022). Teacher creativity: When professional coherence supports beautiful risks. *Journal of Intelligence*, 10, Article 62. <https://eric.ed.gov/?q=teachers%27+creativity+&id=EJ1353616>
- Mattsson, T., & Larsson, H. (2021). There is no right or wrong way: Exploring expressive dance assignments in physical education. *Physical Education and Sport Pedagogy*, 26(2), 123–136. <https://doi.org/10.1080/17408989.2020.1752649>

- Mokhtar, A. A., Noor, M. M., Othman, S. M., & Elias, H. (2020). The impact of instructional supervision practices on teachers' creativity. *Journal of Creativity in Education, 1*(2), 207–224.
- Moser, K. M., Ivy, J., & Hopper, P. F. (2019). Rethinking content teaching at the middle level: An interdisciplinary approach. *Middle School Journal, 50*(2), 17–27. <https://doi.org/10.1080/00940771.2019.1576579>
- Naz, F., & Murad, H. S. (2017). Innovative teaching has a positive impact on the performance of diverse students. *SAGE Open, 7*(4). <https://doi.org/10.1177/2158244017734022>
- Ndungo, I., Asiimwe, L., & Bira, M. (2020). The relationship between school-based practices and students' discipline evidence from secondary schools in kabarole district. *Online Submission, Academia Journal of Educational Research, 8*(3), 84–91. <https://eric.ed.gov/?q=managing+visibility+in+school&pg=3&id=ED604445>
- Olegario, L. F. A., & Buenaobra, F. T. (2021). The relationship between instructional supervision practices and teachers' creativity in higher education. *Philippine Journal of Education, Arts, and Sciences, 5*(2), 1–13.
- Oyelekan, O. S., Igbokwe, E. F., & Olorundare, A. S. (2017). Science teachers' utilisation of innovative strategies for teaching senior school science in ilorin, nigeria. *Malaysian Online Journal of Educational Sciences, 5*(2), 49–65. <https://eric.ed.gov/?q=innovative+teaching&pg=2&id=EJ1142454>
- Page, D. (2015). The visibility and invisibility of performance management in schools. *British Educational Research Journal, 41*(6), 1031–1049. <https://doi.org/10.1002/berj.3185>
- Page, D. (2017). The surveillance of teachers and the simulation of teaching. *Journal of Education Policy, 32*(1), 1–13.
- Paletta, A., Alimehmeti, G., Mazzetti, G., & Guglielmi, D. (2021). Educational leadership and innovative teaching practices: A polynomial regression and response surface analysis. *International Journal of Educational Management, 35*(4), 897–908.
- Pallant, J. (2004). *Spss survival manual: A step-by-step guide to data analysis using spss for windows (versions 10 and 11)* [[applies to SPSS for windows up to version II]]. Open Univ. Press.
- Pallant, J. F. (2005a). *Spss survival manual: A step by step guide to data analysis using spss for windows (versions 12-14)*. Allen & Unwin.
- Pallant, J. F. (2005b). *Spss survival manual: A step by step guide to data analysis using spss for windows (versions 12-14)*. Allen & Unwin.
- Pallant, J. F. (2011). *Spss survival manual: A step by step guide to data analysis using spss*. Allen & Unwin.
- Peter, T. M., Gitonga, C. M., & Kubai, K. I. (2021). Influence of personality types, instructional supervision practices, and performance in public primary schools in kenya. *Educational Research and Reviews, 16*(2), 27–39. <https://eric.ed.gov/?q=instructional+supervision+practices&id=EJ1288296>
- Pollock, J. E., Tolone, L. J., & Nunnally, G. S. (2022). How innovative teachers can start teaching innovation. *Educational Leadership, 78*(9), 20–25. <https://www.ascd.org/el/innovative-lesson-planning>
- Quist, S.-R., & Koomson, I. (2021). Headteachers' instructional supervision practices in ghana. *Journal of Educational Research and Evaluation, 25*(1), 1–16.

- Rais, S., Rubini, B., & Herfina. (2022). Increasing teacher creativity through strengthening transformational leadership, teamwork, and work engagement. *Pegem Journal of Education and Instruction*, 12(1), 232–241. <https://eric.ed.gov/?q=teachers%27+creativity+&id=EJ1329821>
- Riaz, A., Mehmood, M. A., & Hussain, I. (2021). The role of instructional supervision in fostering teachers' creativity: A study of public secondary schools in pakistan. *Journal of Educational Research*, 24(1), 67–86.
- Salihu, A. T., & Ahmad, S. (2019). Instructional supervision and teachers' creativity in public secondary schools in nigeria. *Journal of Education and Practice*, 10(7), 54–59.
- Santos, M. L., Gozalo, M. J., & Martinez, M. (2020). Instructional supervision and teachers' creativity in primary schools. *Frontiers in Education*, 5, 85.
- Solano, R., & Othman, S. (2022). The relationship between instructional supervision practices and teachers' creativity: A mixed-method study. *The Asia-Pacific Education Researcher*, 31(1), 1–11.
- Suriagiri, S., Akrim, A., & Norhapizah, N. (2022). The influence of school principal supervision, motivation, and work satisfaction on teachers' performance. *Cypriot Journal of Educational Sciences*, 17(7), 2523–2537. [https://eric.ed.gov/?q=Supervision+and+Evaluation+of+Instruction&ff1=dtYSince\\_2022&pg=2&id=EJ1350270](https://eric.ed.gov/?q=Supervision+and+Evaluation+of+Instruction&ff1=dtYSince_2022&pg=2&id=EJ1350270)
- Tabachnick, B., & Fidell, L. (20). *Using multivariate statistics* (5th ed., Pearson internat. ed., [Nachdr.]). Pearson Allyn; Bacon.
- Taşdemir, M., & Çelikten, M. (2020). The instructional supervision practices of primary school principals in turkey. *Journal of Educational Research and Evaluation*, 24(2), 265–284.
- Taylor, C., & Rice, R. (2021). Headteachers' instructional supervision practices in england. *Journal of Educational Leadership and Management*, 9(1), 14–23.
- Tienken, C., & Cooper, J. (2022). Instructional supervision and teachers' creativity in public schools in the united states. *Education Sciences*, 12(1), 25.
- Tostao, E., & Mestre, A. (2021). Instructional supervision and teachers' creativity in public schools. *Journal of Education and Training Studies*, 9(3), 149–158.
- Victor, A. A., & Emetarom, U. G. Principals management support practices to promote teachers' instructional improvement for sustainable development in secondary education in anambra state, nigeria. In: *Online submission, paper presented at the annual national conference of the nigerian association for educational administration and planning (naeap) (36th, enugu state, nigeria, oct 9-12, 2017)*. 2017. <https://eric.ed.gov/?q=instructional+supervision+practices&id=ED577704>
- Wang, L., Gao, Y., & Jiang, F. (2020). The effect of teacher innovation on student achievement: Evidence from the timss 2015. *Frontiers in Psychology*, 11, 1971.
- Wieczorek, D., Clark, B., & Theoharis, G. (2019). Principals' instructional feedback practices during race to the top. *Leadership and Policy in Schools*, 18(3), 357–381. <http://dx.doi.org/10.1080/15700763.2017.1398336>
- Yan, X., Mason, J., & Hanna, G. (2019). Probing interactions in exploratory teaching: A case study. *International Journal of Mathematical Education in Science and Technology*, 50(2), 244–259. <http://dx.doi.org/10.1080/0020739X.2018.1494859>



- Yang, L., & Liu, X. (2020). An empirical study of the relationship among teacher creativity, teacher learning, and teacher professional development. *Journal of Educational Administration*, 58(3), 285–302.
- Yang, L., & Ma, Y. (2020). The relationship among instructional supervision, student monitoring, and leadership visibility in china. *Journal of Educational Administration*, 58(6), 720–737.
- Zhang, J., Wang, Y., & Cheng, Y. (2020). The impact of instructional supervision on teachers' creativity in secondary schools in china. *International Journal of Education and Development using Information and Communication Technology*, 16(1), 165–180.