

Principals' Classroom Observation Practices and their Influence on Teaching and Learning in Public Secondary Schools in Machakos Sub-County, Kenya

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ABSTRACT

Principals' instructional leadership bolsters and supports teaching and learning. The study aimed to explore the principals' classroom observation practices and their influence on teaching and learning in public secondary schools in Machakos Sub-County, Kenya. Weber's (1996) instructional leadership model served as the foundation for the study. The research employed a mixed-methods approach using a convergent parallel design. The target population of the research is 3434 and has a sample size of 350 participants, encompassing 10 principals, 40 teachers, and 300 students. The participating schools were selected using a stratified random sampling method. The collected data was cleaned, processed, and analyzed using SPSS 25. Quantitative data was analyzed using percentages and displayed in frequency tables. Qualitative data was labeled, appropriately coded, and transcribed under specified themes. The findings of the study revealed that the principals regularly carried out supervision in the classrooms and ensured that students' behaviors were controlled in the classrooms by setting class rules. The research recommended that the Ministry of Education, along with the relevant educational agencies, should provide in-service training for principals on their roles as instructional leaders to enable them to proficiently discharge their functions; there should be an increase in the provision of the necessary learning resources to help enhance teaching and learning.

Keywords: *instructional leadership, instructional resources, classroom management, teaching and learning*

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INTRODUCTION

Principals' classroom supervision is fundamental to increasing the quality of education. Effective supervision practices are seen as the foundation of high-quality and lifelong learning. The attainment of efficient and successful teaching and learning in schools depends on having adequate supervision (U-Sayee & Adomako, 2021). The classroom observation enables the principals to become more acquainted with the teachers and students, and also unearth the various techniques the teachers use when executing their instruction functions. Effective supervision practices are a prerequisite for high-quality teaching and learning. An effective supervision process is also needed to support the learning process of teachers and to evaluate what the students have learned. The supervisory process should be able to enhance teachers' capacities as well as improve the instructional processes. Educational stakeholders have the obligation to supervise educational activities in order to achieve their educational goals. Educational supervision improves student academic performance and the quality of teaching and assists supervisors in controlling teachers' instructional activities.

According to Mulatu (2016), educational supervision ensures that proper standards are adhered to in classrooms and motivates teachers to further their professional growth in order to fulfill the learning needs of their students. Student performance will improve when instructional supervision in the classroom is enhanced. Principals' classroom observation practices help in providing educators with the support they require to succeed, as well as enabling them to assess the various pedagogical approaches and techniques to guarantee high-quality students' achievement in classrooms.

Baker and Bloom (2017) asserted that principals' visitations to the classrooms enable them to observe how teachers carry on instruction and also ensure that the various instructional practices are observed by the teachers in the classrooms. Classroom observation is one of the stages of clinical supervision, and the principal purpose of observation is to capture the realities of the occurrences in the classrooms. Classroom observation positively and significantly influences teachers' effectiveness in the classroom. Teachers' who are adequately observed in the classroom perform more effectively than their counterparts who are not adequately observed (Iroegbu & Etudor-Eyo, 2016).

A comparative study was done on principals' classroom observation practices in both private and public schools. During this study, Amin et al. (2022) discovered that there is a significant difference in principals' instructional supervision in public and private schools. Some of the differences highlighted by Amin et al. are private-sector principals frequently visit their teachers' classes, whereas public-sector principals do so only occasionally; principals perform instructional supervision regularly, whereas public-sector principals do so only on occasion; private sector principals frequently monitor teachers' appropriate use of instructional aids, whereas public-sector principals only do so occasionally. Amin et al. concluded that the principals of private schools have significantly better practice of instructional supervision as compared to their counterparts.

Principal supervision practices need to provide immediate feedback and tangible ways on how to help a teacher perform better in the teaching-learning process. As such, effective supervision therefore helps teachers improve their work performances, develop the ability and confidence they need in classroom practices, and ensure professional growth and teacher quality (Lyonga, 2018).

Principals need to know what is really happening in the classes at their school. The principals must be well acquainted with all the teachers and all their students. The principals are to carry out their supervisory role by going around the school, looking at the situation of learning activities carried out by the teacher in the classroom. Principals are tasked with the function of directly observing the learning activities in the classrooms and making informed decisions on what should be done to improve the system. Supervision promotes the collegial process of discussion between the principals and the teachers (Nurabadi, 2019). The supervisory effectiveness of the principal involves the proper implementation of curriculum, the

management of classes, and the utilization of good instructional supervision to achieve the desired results in the classroom.

Harris et al. (2017) asserted that teaching and learning can be improved when the principals spend a large proportion of their time monitoring and supervising instructional practice, as well as promoting the professional development of teachers. Principals actively shape and improve instructional processes through their oversight, monitoring, and mentoring of the professional growth of the teachers.

The principals' classrooms observational practices focus on the following areas:

1. Effective classroom management
2. Supervision of teachers
3. Monitoring students' behaviors.

Effective classroom management

Effective classroom management concentrates on how well organized and tidy the classroom is. The principal can get a better understanding of the teaching and learning processes in the classroom by making daily visits to the classroom. Principals are required to use classroom walk-throughs as a way to monitor classroom instruction (Hvidston et al., 2016).

The uncondusive conditions in the classrooms poses a serious challenge for effective teaching and learning (Şanlı, 2019). The unfavorable conditions in the classrooms, such as a poor lighting system and insufficient space, hamper students' learning. Flower et al. (2017) postulated that teachers find it difficult to maintain order in the classroom when there aren't any regulations in place to guide student behavior. Rules for the classroom are widely acknowledged as an integral aspect of efficient management of the classroom (Alter & Haydon, 2017). In order for rules to be effective in the classroom, those who violate them must face consequences. Principals are to ensure that teachers are properly trained in handling difficult behaviors to enable them to prevent unruly behaviors exhibited by students.

Kwok (2017) opined that higher-quality teaching can be achieved through a more relationally oriented approach to classroom management. Principals need to adopt a more relational approach that teachers can use to manage the classroom. Teachers who established stronger student-teacher interactions with their students received higher marks for classroom management. Although teachers' attitudes about classroom management varied, they generally focused on and emphasized the significance of creating cordial student interactions to manage their classes effectively. Obispo et al. (2021) conducted a study on "teachers' classroom management methods and student-teacher connectivity and anxiety." According to the findings, teachers authoritatively manage their classrooms and place high importance on an authoritative classroom management approach because they see it as a key to effective instruction. This delineates that the teachers exercise their authority over the students by making sure that they have absolute control over their classrooms.

Ahmed et al. (2018) used a descriptive design with 126 teachers to study "views of gender differences among teachers' classroom management tactics." They concluded that teachers' gender does affect how they handle classroom management. On four of the six criteria for teaching in the classroom, women teachers did better than their male counterparts. These criteria were (a) working together, (b) getting along with students, (c) using both emotion and logic, and (d) managing the classroom. Classroom management is a difficult and demanding duty that necessitates the teacher's skills and expertise.

Supervision of teachers

The school principals are to be proactive and ensure that the teachers are consistently supervised. The supervision of teachers enables the principals to know the variety of instructional strategies that are implored by the teachers while carrying on instruction. The principals believed that the supervision and evaluation process permitted them to engage in more candid and constructive instructional dialogue with teachers (Wieczorek et al., 2019). The school principals are to observe the teachers in the classrooms and

also provide feedback to the teachers after their observation. This helps to put teachers on their guide and makes them more efficient in the discharge of their duties. Teachers in schools where instructional supervision was adequate were more effective than those that had inadequate instructional supervision (Aydin & Kenan, 2020).

The primary goal of supervision would be to assist teachers in advancing their instructional skills and abilities. Supervision is to improve a teacher's command of the subject matter, his ability to adapt to changing circumstances, and his ability to decide to resolve problems that arise during the teaching-learning process (Kurebwa et al., 2015).

Supervision facilitates the collaboration between the principals and teachers to work together toward achieving the school's goals and objectives. Supervision is a multi-faceted method that focuses on instruction and aims to provide a conducive teaching environment to improve their professional expertise. It is a collaborative effort between teachers and administrators (Ubogu, 2020).

The monitoring of syllabus coverage has an influence on teaching and learning outcomes. The principals are to make sure that the prescribed syllabus is covered and the instruction materials of the teachers are checked regularly. Checking teachers' professional documents immensely contributes to improved teaching and learning (Obunga, 2019). Teachers appreciate being supervised because it enhances their effectiveness since it motivates them to be prepared for the lessons and to take full responsibility for their assignments (Can & Ceylan, 2019).

As leaders in education, school principals have a responsibility to oversee classroom instruction and implement the appropriate systems and procedures to enhance the quality of instruction. Teachers' performance is significantly and positively affected by the principal's academic supervision. Teacher performance can be improved if the academic supervision of the principal is appropriately implemented (Sunaryo, 2020). Principals' instructional supervision practice has a positive impact on teacher performance.

Monitoring students' behaviors

Principals are to continuously monitor the comportment of their students while they are in class and on the campus. Principals are to also observe the students and see how they are reacting to the lesson. This can be achieved when the principals make regular visitations in the classrooms. Principals' classroom visitation influences students' performance (Ruth, 2018). The checking of students' lessons and their academic records vividly give the principal a foresight of what the students are taught and also help the principals determine the current status of the students, thus enhancing their academic performance.

Etiquette behaviors in the classroom can assist the students to understand the classroom learning situation and help to promote the development of a conducive classroom (Chung et al., 2022). Classroom behavior analysis aims to study the mechanisms underlying teachers' teaching activities and students' academic development in the classroom, and to help teachers and students reflect on their classroom performance, so as to promote the improvement of classroom teaching quality.

Theoretical Framework

The Weber (1996) instructional leadership model guided the research. This theory emphasizes how school leaders can effectively and efficiently run the affairs of the school. Weber stated that successful instructional leadership allows the principal to share leadership roles with the people who implement them. The model identified five fundamental dimensions of school leadership: a) establishing the school goals; b) administering the curriculum and instruction; c) fostering a healthy learning atmosphere; d) observing and enhancing instruction; and e) evaluating the educational programs. This theory states that school leaders are to initiate and establish quality teaching and learning. Hence, the model encourages collaborative leadership and teacher empowerment, which help establish a school that prioritizes teaching and learning.

Hallinger and Murphy's (1985) model for instructional leadership is in line with Weber's theory. They asserted that for instructional leadership to work, the principal must decide what the school's purpose is, run the curriculum, and make sure that the school is a favorable environment for instruction. This model was chosen because of its relevance to the study. The theory demonstrates how principals employ instructional leadership to enhance teaching and learning. Principals who actively lead instruction improve teaching and learning by guiding, supporting, and equipping teachers and students.

METHODOLOGY

A mixed-methods design was used in the study. The quantitative and qualitative data help to better comprehend the different perspectives of both methods used in the study simultaneously; the researcher employed mixed methods because one approach is insufficient to fully capture the details of the complete study. According to Shorten and Smith (2017), mixed-methods research can benefit from the potential advantages of both qualitative and quantitative techniques. Using questionnaires and interview guides as the research tools, a convergent design was employed to gather quantitative and qualitative data simultaneously. T

he gathered data, both quantitative and qualitative, were examined and interpreted separately. A thorough examination of the research is provided by the convergent parallel design, which combines quantitative and qualitative data (Razali et al., 2019).

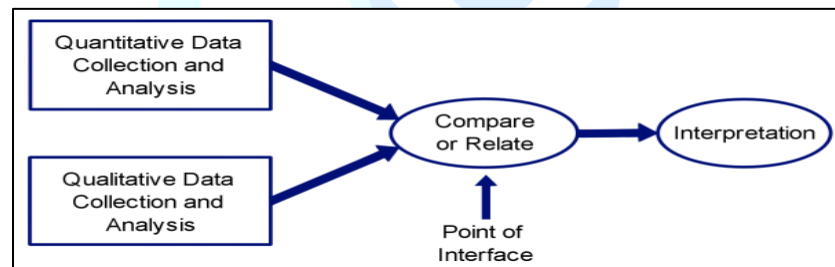


Figure 1. An illustration of simple convergent-parallel mixed techniques

Figure 1 shows that both the quantitative and qualitative data were gathered concurrently but analyzed separately; the quantitative statistical result was compared with the qualitative findings at the point of interface, and the overall results from the mixed data were interpreted in a report. With this method, the researcher obtained information from a wide-ranging population.

Target population of respondents

The study targeted 3434 participants, comprising 34 principals, 400 teachers, and 3000 Form 3 students. Students from Form 3 were chosen to take part in the study because this class is next to the senior secondary class, which make them knowledgeable to respond to the questionnaires. The targeted population of the respondents was drawn from the 34 public secondary schools in Machakos Sub-County, Kenya.

Sampling of Respondents

The researcher chose 350 participants as an appropriate sample size that served as a true representation of the target population. The sample sizes comprised of 10 principals, 40 teachers and 300 students. The principals were chosen by means of purposive sampling, while the lottery technique was employed to randomly choose teachers and the students.

Instruments

The instruments used to gather the data were the questionnaires and the interview guide. The structured interview guide was utilized to collect the qualitative data for the principals, while the questionnaires were utilized to collect the quantitative data for both the teachers and the students. From the questionnaires, a scale of four points that labels "Strongly Agree (SA), Agree (A), Disagree (D), and Strongly Disagree (SD)" was employed to establish the participants' level of agreement or disagreement. The respondents were allowed to select appropriate answers that best describe the questions.

The researcher ensured that the informed consent of the respondents was observed and also assured the respondents of their confidentiality and anonymity as they filled out the questionnaires. The respondents were told to be anonymous as a way of protecting their privacy. The researcher upheld all ethical issues and respected the dignity and freedom of all the respondents.

Data collection procedure

As per the convergent parallel design of the mixed-methods approach, the data entails the gathering of i) quantitative data and ii) qualitative data. The quantitative data was employed to gather data from the instructors and learners, while the qualitative data was employed to gather information from the principals. The questionnaires were given to each sampled teacher and student, followed by an interview conducted with the principals, while providing adequate guidance to the respondents to ensure accurate data collection.

Quantitative data collection procedures

A letter was sent to all of the sampled respondents (teachers and students) from the different schools taking part in the study and asked them to complete the questionnaires. The questionnaires were generated in advance and administered to the teachers. The questionnaires were hand-delivered to all the participants per school, and they were asked to fill out and return the questionnaires before the end of two weeks. For the sake of the respondents' privacy and confidentiality, they were advised to be anonymous when filling out the questionnaires. The researcher did a follow-up and reminded the respondents to return the questionnaires. After two weeks, the questionnaires were picked up from each respondent at his or her school.

Qualitative data collection procedures

The researcher wrote a letter to the principals requesting to have an interview with them at their convenience. The time and venue were scheduled in agreement with the respondents. The researcher indicated from the interview guides areas that the interview covered in relation to the study. The respondents were labeled from Principal A to Principal J. The researcher engaged the respondents by asking them one question at a time from the interview guides, which he prepared beforehand. The researcher listened attentively as he awaited responses to the questions from the respondents. While the respondents were responding to the questions asked, the researcher wrote down and tape-recorded the responses from the participants to get correct information. The researcher guided and directed the conversation in such a way that enabled him to obtain details of the information that was pertinent to the research. Upon the completion of the interview, the researcher finally appreciated the respondents for availing themselves to be interviewed and assured them of their privacy.

Data Analysis

The quantitative data was collected, and the raw data was analyzed utilizing SPSS version 25, which was employed to clean, code, and organize the information in order to produce useful conclusions and findings. Quantitative data was summarized through percentage calculations and displayed in frequency tables, thereby providing a graphical overview that facilitated the interpretation.

The qualitative data was gathered verbatim from each respondent (from Principal A to Principal J) and analyzed. The qualitative information was categorized, coded, and transcribed according to predetermined theme. The findings of the qualitative information were interpreted narratively, and the outcomes of the qualitative data were compared or related to the quantitative data.

FINDINGS

This article reports on principals' classroom observation practices and their influence on teaching and learning. The findings are presented based on the responses from the participants. The teachers and the students responded to the questionnaires according to their views, while the opinions of the principals were gathered through an interview that was conducted.

Teachers' perceptions of principals' classroom observation practices

This article aimed to find out how principals' classroom observation practices influence teaching and learning. In seeking to comprehend the opinions of teachers on classroom management, a Likert scale of four points: "Strongly Agree (SA), Agree (A), Disagree (D), and Strongly Disagree (SD)" was used, and the following results were found, as displayed in Table 1.

Table 1. Teachers' perceptions of principals' classroom observation practices

Statement	SA		A		D		SD	
	n	%	n	%	n	%	n	%
• My principal visits the classrooms regularly to ensure successful instruction and learning.	13	38.2	16	47.1	3	8.8	2	5.9
• The principal allows teachers to use a student-centered approach while teaching.	17	50.0	17	50.0	0	0	0	0
• My principal works along with the teachers in order to curtail unruly behaviors from students in the classrooms.	20	58.8	10	29.4	3	8.8	1	2.9
• My principal works along with the teacher to ensure that rules are set in the classrooms.	15	44.1	15	44.1	2	2.9	2	2.9
• My principal works with teachers to determine the best way to improve teaching and learning in the classrooms.	10	29.4	22	64.7	0	0	2	5.9

Table 1 shows that 16 (47.1%) of the teachers agreed and 13 (38.2%) strongly agreed that their principals visit the classrooms regularly to ensure successful instruction and learning; contrary to this assertion, 3 (8.8%) disagreed and 2 (5.9%) strongly disagreed. 17 (50.0%) of the instructors strongly agreed that the principals encourage a student-centered approach while teaching and 17 (50.0%) also agreed with the claim. The data also shows that 20 (58.8%) of the teachers strongly agreed, and 10 (29.4%) agreed that their principals work along with the teachers in order to curtail unruly behaviors from students in the classrooms, whereas 3 (8.8%) disagreed and 1 (2.9%) strongly disagreed.

Furthermore, 15 (44.1%) of the teachers agreed that the principals work along with the teachers to ensure that rules are set in the classrooms; similarly, 15 (44.1%) of the teachers strongly agreed, whereas 2 (5.9%) disagreed with the assertion. Moreover, the majority 22 (64.7%) of the teachers agreed, and 10 (29.4%) strongly agreed that the principals work with teachers to determine the best way to enhance teaching and learning in the classrooms; inversely, 2 (5.9%) of the teachers strongly disagreed with the claim.

Students' opinions of principals' classroom observation practices

The study also ascertained the responses of the students to the principals' classroom observation practices influence teaching and learning. The questionnaires were filled out by the learners using a Likert

scale of four points: "Strongly Agree (SA), Agree (A), Disagree (D), and Strongly Disagree (SD)," and their answers are shown in Table 2.

Table 2. Students' opinions of principals' classroom observation practices

Statement	SA		A		D		SD	
	n	%	n	%	n	%	n	%
• The classrooms are regularly visited by the principal to ensure successful instruction and learning are taking place.	70	33.3	105	50.0	15	7.1	20	9.5
• My principal ensure that the teacher uses a student-centered approach while teaching.	110	52.4	80	38.1	5	2.4	15	7.1
• The principal works along with the teachers in order to curtail unruly behaviors from students in the classrooms.	95	45.2	95	45.2	10	4.8	10	4.8
• The principal ensures that students' behaviors are controlled by setting class rules.	85	40.5	100	47.6	25	11.9	0	0
• The principal works with teachers to determine the best way to enhance teaching and learning in the classrooms.	55	26.2	140	66.7	8	3.8	7	3.3

Table 2 depicts that 105 (50.0%) of the students agreed that the classrooms were regularly visited by the principal to ensure successful instruction and learning were taking place, whereas 20 (9.5%) strongly disagreed and 15 (7.1%) disagreed, respectively. Moreover, 110 (52.4%) of the learners strongly agreed, and 80 (38.1%) agreed that their principals ensured that teachers use a student-centered approach while teaching. On the contrary, 15 (7.1%) strongly disagreed, and 5 (2.4%) disagreed with the assertion. A large percentage 190 (90.4%) of the students were in agreement that both the principals the teachers curtailed the unruly behaviors exhibited by the students in the classrooms, while a minority 20 (9.6%) disagreed and strongly disagreed with the claim.

Additionally, 100 (47.6%) of the students agreed, and 85 (40.5%) strongly agreed that the principal ensures that students' behaviors are controlled by setting class rules, while 25 (11.9%) disagreed with the claim. Finally, 140 (66.7%) of the students agreed that their principals work with teachers to ensure teaching and learning are enhanced in the classrooms, while an infinitesimal number of students representing 7 (3.3%) strongly disagreed with the assertion.

Principals' views on their classroom observation practices

Principals also shared their experiences in an interview regarding their classroom observation practices. When the principals were interviewed about what measures they take to ensure that the classrooms are properly managed for effective teaching and learning, majority of the principals pointed out that:

"They often visit the classrooms, and whenever inappropriate behaviors are observed from the students, they are immediately curtailed through taking discipline measures."

A comparable statement was made by Principal F:

"As a principal, I don't just sit in my office to issue commands; I walk around the school and pay regular visits to the various classrooms to monitor how well the teachers are teaching and to also observe the conduct of the students."

One of the principals, principal H, further stated during the interview that:

"As a principal, I don't only visit the classrooms to observe how they are managed, but I also teach in the classrooms as an instructional leader; this has set the pace for the teachers to emulate and follow suit."

Additionally, in an interview with Principal B, it was noted that:

"I encourage the teachers at the beginning of every term to set class rules with the involvement of the students, and this has tremendously helped in managing the classrooms."

DISCUSSIONS

The results showed that majority of the principals visited the classrooms regularly to ensure successful teaching and learning are going on. The frequent visitation of the principals in the classrooms helps to improve teachers' classroom management and instructional techniques. The outcomes of the research also displayed that the unruly behaviors exhibited by students in the classrooms were curtailed by the school principals. This signifies that students' behaviors were controlled in the classrooms by the principals through the implementation of their instructional leadership.

The results from the interview with the principals reported that the majority of the principals often visited the classrooms to ensure that they are properly managed. The interview results further stated that the principals help to curtail inappropriate behaviors from the students by setting class rules and instituting disciplinary measures for students involved in academic malfeasance. This shows that the principals were able to put in some mechanisms, such as setting class rules, to help control the behaviors of students. The result from the principals validates the finding from Alter and Haydon (2017), who found out that rules for the classroom are widely acknowledged as an integral aspect of efficient management of the classroom.

The findings from the principals corroborate with the results of the teachers and students that regular visitations are made in the classrooms by the principals to observe and make sure that quality instructions are implemented in the schools. From the results, it can be deduced that the principals played their leadership roles by engaging the teachers and learners to make sure that a positive environment is provided in the classrooms that enhances teaching and learning. The supervision skills, interpersonal relationship skills, and decision-making skills of the principals significantly contribute to effective classroom management (Francis & Oluwatoyin, 2019). This implies that good academic supervision improves teacher performance and students learning in the classroom.

The results also portrayed that the efficient observation of classrooms propels teaching and learning. Kwok (2017) opined that higher-quality instruction and learning can be attained through a more relationally oriented approach to classroom supervision. The management of the classrooms creates a conducive atmosphere that propels effective teaching and learning. Therefore, school leaders are required to shoulder the responsibility of creating a positive climate that is conducive to learning.

CONCLUSIONS

The findings showed that the principals made regular classroom visits and ensured that successful teaching and learning were carried out. Furthermore, the outcomes of the study also portrayed that students' behaviors were controlled in the classrooms by the school principals, which had tremendously helped to foster teaching and learning. Finally, the results also proved that the principals adequately

worked with the teachers in setting class rules as a means of controlling students' behaviors in order to create a conducive atmosphere in the classroom that enhanced teaching and learning.

Recommendations

Based on the study's findings, the researcher has recommended the following:

- The Ministry of Education, along with the relevant educational agencies, should provide in-service training for principals so as to enable them to proficiently discharge their functions, thereby leading to effective teaching and learning. Principals should be adequately trained and enlightened on more robust supervision practices through seminars and conferences, which may include classroom observation, thereby having a positive impact on the teachers' effectiveness.
- The Ministry of Education should increase the provision of the required instructional resources to enhance teaching and learning. Through the provision of instructional materials, the teachers will be fully equipped to teach, thereby granting students easy access to comprehend their learning.

References

- Ahmed, M., Ambreen, M., & Hussain, I. (2018). View of gender differentials among teachers' classroom management strategies in Pakistani context. *Journal of Education and Educational Development*, 5(2).
- Alter, P., & Haydon, T. (2017). Characteristics of effective classroom rules : A review of the literature. *Teacher Education and Special Education*, 40(2). <https://doi.org/10.1177/0888406417700962>
- Amin, M., Amin, H., & Rashid, S. (2022). Instructional supervision practices: Comparison of private and public secondary schools of Lahore. *VFAST Transactions on Education and Social Sciences*, 10(1), 197–203.
- Aydin, B. & Kenan, Ö. (2020). View of school principals' instructional feedback to teachers. *International Journal of Curriculum and Instruction*, 12, 295–312.
- Baker, J. A., & Bloom, G. S. (2017). Growing Support for Principals. *The Learning Professional*, 38(2), 61-65,79.
- Can, S. & Ceylan, M. (2019). Evaluation of teachers' views on school managers' classroom supervision. *Turkish Online Journal of Qualitative Inquiry*, 10(4), 490–510.
- Chung, C., Albert, Y., Sun, Y., Li, G., Peng, J., Ran, F., & Wang, Z. (2022). Identifying and monitoring students' classroom learning behavior based on multisource information. *Hindawi Mobile Information Systems*, 2022.
- Flower, A., Mckenna, J. W., & Haring, C. D. (2017). Behavior and classroom management: Are teacher preparation programs really preparing our teachers? *Preventing School Failure*, 61(2), 163–169. <https://doi.org/10.1080/1045988X.2016.1231109>
- Francis, O. B., & Oluwatoyin, F. C. (2019). Principals' personnel characteristic skills: A predictor of teachers' classroom management in Ekiti State Secondary Schools. *International Journal of Educational Leadership and Management*, 7(1), 72. <https://doi.org/10.17583/ijelm.2019.3573>
- Hallinger, P., & Murphy, J. (1985). Assessing the instructional management behavior of principals. *The Elementary School Journal*, 86(2), 217–247. <https://doi.org/10.1086/461445>
- Harris, A., Jones, M., Cheah, K. S. L., Devadason, E., & Adams, D. (2017). Exploring principals' instructional leadership practices in Malaysia: Insights and implications. *Journal of Educational Administration*, 55(2), 207–221.

- Hvidston, D., McKim, C. A., & Mette, I. (2016). Principals' supervision and evaluation cycles: Perspectives from Principals. *Education Leadership Review, 17*(1), 100–113.
- Iroegbu, E. E.; Etudor-Eyo, E. (2016). Principals' instructional supervision and teachers' effectiveness. *British Journal of Education, 4*(7), 99–109.
- Kurebwa, M., Wadesango, N., & Wadesango, V. O. (2015). Challenges faced by deputy heads in supervising teachers in primary schools. *International Journal of Educational Sciences, 9*(2), 187-197.
- Kwok, A. (2017). Relationships between instructional quality and classroom management for beginning urban teachers. *Educational Researcher, 46*(7). <https://doi.org/10.3102/0013189X17726727>
- Lyonga, N. A. N. (2018). Supervision and teachers' work performances in primary schools in Konye SubDivision in Cameroon. *Journal of Educational and Social Research, 8*(2), 115-124.
- Mulatu, D., 2016. The nexus between instructional supervision, supervisors' and teachers': the practical paradox and its effect of quality education a case of Woliar Zone Administration elementary and secondary school (1-8). *J. Educ. Res. 2* (4), 26–45. <https://eric.ed.gov>
- Nurabadi, A. (2019). Informal supervision model “managing by walking about” in improving quality of learning. *Advances in Social Science, Education and Humanities Research, 382*, 10–12.
- Obispo, R. T., Magulod, G. C., & Tindowen, D. J. C. (2021). Teachers' classroom management styles and student-teacher connectedness and anxiety. *International Journal of Learning, Teaching and Educational Research, 20*(5), 123–141.
- Obunga, D. J. (2019). Influence of principals' instructional supervision practices on Kenya certificate of secondary education performance in public schools, Loitokitok Sub-County.
- Razali, F. M., Aziz, N. A. A., Rasli, R. M., Zulkefly, N. F., & Salim, S. A. (2019). Using convergent parallel design mixed method to assess the usage of multi-touch hand gestures towards fine motor skills among pre-school children. *International Journal of Academic Research in Business and Social Sciences, 9*(14), 153–166.
- Ruth, M. (2018). Influence of principals' instructional supervision practices on students' KCSE performance in public secondary schools in Mwala Sub-County.
- Şanlı, Ö. (2019). An evaluation of the teachers' classroom management problems. *Educational Research and Reviews, 14*(8), 282–292.
- Shorten, A., & Smith, J. (2017). Mixed methods research: Expanding the evidence base. *Evidence-Based Nursing, 20*(3), 74–75.
- Sunaryo, Y. (2020). Academic supervision of school principals and teacher performance: A literature review. *International Journal Pedagogy of Social Studies, 5*(2), 17–34.
- Ubogu, R. (2020). Supervision of instruction: A strategy for strengthening teacher quality in secondary school education. *International Journal of Leadership in Education, 1*-18.
- U-Sayee, C. R., & Adomako, E. B. (2021). Supervisory practices and challenges faced by senior high school principals in Greater Monrovia, Liberia: implications for quality education. *Heliyon, 7*(4), e06895. <https://doi.org/10.1016/j.heliyon.2021.e06895>
- Weber, J. R. (1996). Leading the instructional programme. *School Leadership: Handbook for Excellence, 253*–278.
- 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. <https://doi.org/10.1080/15700763.2017.1398336>