The Influence of Communication Practices on Academic Performance in Public Secondary Schools: A Case Study of Matuga Sub- County, Kwale County, Kenya

Maryanne Obonyo Imelda & Beth Mwelu Mutilu

School of Education

Mount Kenya University

Email: imeldaobonyo2@gmail.com

Abstract: This study aimed to investigate the influence of communication practices employed by principals in public secondary schools on academic performance within Matuga Sub-County, Kenya. The study focused on three key areas: determining the influence of setting school performance targets, investigating how communicating goals and standards influence students' performance, and examining how conducting feedback forums influence students' performance. Using a descriptive research design, the study targeted all the 34 principals, 758 teachers, and 20, 090 pupils at public secondary schools in Matuga Sub-County. Sample size was determined using Nassiuma's 2008 and Daniel's (1999) formulae. Data was collected from 101 teachers and 410 students through structured and unstructured questionnaires respectively. Piloting was conducted in Kinango Boys' secondary school in Kinango sub county. Data analysis entailed descriptive statistics. The study results demonstrate that principals' communication practices significantly influence academic performance. Both teachers and students consistently reported frequent utilization of these communication practices on academic performance. The findings indicated consensus among teachers and students regarding the clarity of educational targets and the importance of involving staff in goal development. Both groups also recognized the value of using student performance data for academic goal setting. However, a slight variance in perceptions emerged concerning the effectiveness of communicating the school's mission, with teachers holding a more positive view than students. The findings may contribute to academic literature and practical use in school community fraternity i.e., principals, deputy principals, senior teachers, heads of departments, entire teachers, and students with goal of enhancing the academic performance.

Keywords: *Academic performance, Communication practices, Secondary Schools, Student, Principals.*

1. Introduction

Education is the cornerstone of development in any society, and effective communication plays a pivotal role in shaping the academic landscape (Zardari & Ali, 2023). In the contemporary world, the relationship between communication strategies and academic performance among students has become a topic of significant interest (Maggin et al., 2020). The ability of students to access, comprehend, and effectively utilize information is crucial for their academic success (McNair et al., 2022). Thus,

investigating the influence of communication strategies on students' academic performance is essential, particularly in the context of public secondary schools in Matuga Sub-County, Kenya. Effective communication strategies could potentially catalyze improving academic outcomes in these schools. This study delves into the intricate relationship between communication practices and academic performance among students in public secondary schools in Matuga Sub-County.

Several factors underline the importance of this research endeavor. Firstly, Matuga Subcounty presents a unique educational setting with challenges like limited access to resources, diverse student populations, and varying socio-economic backgrounds (McNair et al., 2022). These factors can significantly influence the effectiveness of communication strategies employed within the schools. Secondly, students' academic performance reflects their efforts and a manifestation of the educational system's efficiency. Effective communication strategies can bridge the gap between students' diverse backgrounds and the curriculum, ultimately enhancing their academic success. Thirdly, the study aligns with the broader goals of the Kenyan government's education policies, which emphasize quality education for all. By identifying the communication strategies that work best within the local context, this research can contribute to enhancing education policies and practices.

The primary objective of this research is to investigate the influence of communication practices on the academic performance of students in public secondary schools in Matuga Sub-County, Kenya. The study identifies the prevailing communication practices employed by public secondary schools in Matuga Subcounty and analyzes the influence of these communication strategies on students' academic performance. The study's objectives were to determine the influence of setting school performance targets, investigate how communicating goals and standards influences students' performance, and examine how conducting feedback forums influences students' performance.

The leadership plays a vital role in promoting academic performance, sustainability, and success within an institution or organization. Most research studies and reports, particularly those published in Kenya, argue that a student's academic performance and success are significantly influenced or determined by their effort (Onderi et al., 2019). Indisputably, such an ideology and concept contain merit considering students should work hard and exert relevant practices to achieve academic excellence. Further, studies also reveal contradictory findings about the influence of the principal instructional leadership on the academic performance. Some studies have linked academic success to the effort of the principal instructional leadership (Persell and Cookson, 1982;

Hallinger, 2011; Leithwood and Riehl, 2003; Maranga, 2019; Obunga 2019; Muasa, 2022; Achieng, 2015).

There are other aspects that may contribute to students' strong academic achievement in schools, which is frequently attributed to instructional leadership, according to the few studies that have identified a weak correlation between academic performance and instructional leadership (Heaven and Bourne, 2016; Lee and Dimmock, 1999). Similarly, studies in Kenya have confirmed the same evidence where the direct implementation of instructional programs by the principal had no impact academic performance (Nyagaka & Odongo, 2013; Muasa, 2018).

There are, however, few research that specifically examine the impact of instructional leadership on students' academic achievement in Kenya's public secondary schools, notably those in Kwale County. For instance, a study done by Mwangi in Matuga did not focus on the resource allocation and provision in teaching and learning and how it influences academic performance of students (Mwangi, 2014). He only focused on the influence of principal's target setting, checking of professional records, and principal holding academic clinics on academic performance of students (Mwangi, 2014). As a result, there is a disparity in the fundamentals of academic performance and leadership in Kenya's public secondary schools, particularly in Kwale County.

2. Literature Review

Effective communication is the cornerstone of quality education. It facilitates the transmission of knowledge and plays a pivotal role in shaping the academic landscape (Teo, 2019). In the context of public secondary schools in Matuga Sub-County, Kenya, this literature review explores the intricate relationship between communication practices and academic performance. Like many others in the developing world, this region faces unique educational system challenges, making it a crucial case study for understanding the influence of communication practices on student achievement. Communication practices in the educational context encompass various activities, including teacher-student interactions, peer-to-peer communication, school-parent communication, and educational technology. These practices influence the flow of information, feedback, and support within the school ecosystem, ultimately affecting students' learning experiences and academic outcomes.

Effective communication between teachers and students is not merely a pedagogical tool but the very bedrock upon which a vibrant and successful learning environment is built (Tursunboyeva & Ashirova, 2021). This facet of

communication encompasses more than just the impartation of knowledge; it extends to providing guidance, feedback, and, crucially, nurturing a supportive and respectful rapport (Han & Tosten, 2016). A considerable body of research underscores the pivotal role of this teacher-student interaction in shaping student outcomes, including their engagement, motivation, and, ultimately, their academic performance.

Peer interactions in the classroom are a powerful force for fostering collaborative learning (Huber & Carter, 2019). They allow students to exchange ideas, clarify doubts, and jointly explore the subject matter. Research indicates that cooperative learning strategies encouraging peer communication can significantly influence academic achievement (Brown & Palincsar, 2018). Johnson and Johnson's seminal work in 1989 highlighted the benefits of cooperative learning. Their research showed that students who engage in collaborative activities tend to develop a deeper understanding of the material and are more likely to retain and apply their knowledge effectively (Loes et al., 2017).

Peer-to-peer communication can be valuable in Matuga Sub-County, where students often come from diverse socio-economic backgrounds and face various challenges (Forbes,2020). Collaborative learning allows students to pool their collective knowledge and encourages empathy and mutual support. When students from different backgrounds interact and learn together, it can break down barriers and foster a sense of inclusion and belonging (Almulla, 2016).

Peer communication also nurtures problem-solving skills. When students engage in discussions and collaborative projects, they encounter challenges that require critical thinking and creative solutions (Kampyli & Berki, 2014). These experiences enrich their academic journey and equip them with essential life skills. Educators can implement cooperative learning strategies to harness the potential of peer-to-peer communication in Matuga Sub county's public secondary schools. These may include group projects, peer tutoring, and peer-led discussions. Creating an inclusive and supportive classroom environment where students feel comfortable sharing their thoughts and ideas is equally important.

The traditional parent-teacher conference is one of the primary mechanisms for facilitating school-parent communication (Epstein, 2013). These face-to-face meetings allow educators to share insights into a student's progress, strengths, and areas needing improvement. Simultaneously, parents can provide valuable input and better understand their child's educational journey. In Matuga Sub-County, these conferences can bridge the school environment and the diverse home situations students may experience. In the context of Matuga Sub

county's public secondary schools, effective school-parent communication can be a potent catalyst for student success. Many students come from diverse socio-economic backgrounds, and their families may not have had extensive exposure to the formal educational system (Mapp & Kuttner, 2013). By involving parents and providing them with insights into the educational process, schools can empower parents to support their children's learning effectively. To optimize school-parent communication in Matuga Sub-County, schools can consider tailoring their communication strategies to the specific needs and preferences of the community. This might involve bilingual communications, community meetings, and the use of local cultural norms to build trust and engagement.

The pivotal role of teachers in shaping the educational experience cannot be overstated. However, the effectiveness of their impact is greatly influenced by their ability to communicate effectively (Nieto, 2015). In the context of public secondary schools in Matuga Sub-County, Kenya, where socio-economic disparities and diverse student backgrounds are prevalent, adequately training teachers in communication skills cannot be understated. The research conducted by Kanini and Muthaa (2018) in Kenya underscores the transformative power of teacher training programs in enhancing student outcomes through improved communication practices.

Kanini and Muthaa's study accentuates that effective communication skills are not innate but can be developed through targeted training. In an educational landscape where students' experiences and needs are multifaceted, teachers equipped with refined communication abilities are better positioned to engage, inspire, and guide their students. By providing teachers with the tools to navigate diverse classrooms and communicate across varied socio-economic and cultural contexts, teacher training programs become a catalyst for creating inclusive learning environments. The research findings underline that training in communication skills is not merely an accessory to pedagogical expertise but a cornerstone of effective teaching. When teachers are proficient in conveying concepts, fostering meaningful interactions, and providing constructive feedback, students benefit on multiple levels (Muthaa, 2018). They are more likely to be engaged, motivated, and receptive to learning. Moreover, teachers' adeptness at communicating with parents and fellow educators strengthens the collaborative partnerships crucial for student success.

In Matuga Sub-County, where students may face obstacles related to language, cultural diversity, and limited resources, the influence of teacher communication skills is magnified. Educators trained to adapt their communication strategies to address these challenges can inspire confidence and foster a sense of belonging among students

who may otherwise feel marginalized. A comprehensive approach is essential to maximize the benefits of teacher training in communication skills. This could include workshops, seminars, and ongoing professional development opportunities. Integrating practical communication strategies into teacher education curricula can give aspiring educators a solid foundation in effective communication from the outset of their careers.

In education, community engagement is not an isolated endeavor but a dynamic partnership that extends the school's boundaries into the broader local context. The study conducted by Kimemia and Mugo (2016) in a rural Kenyan setting underscores the profound significance of community engagement in enhancing communication practices within schools. This section explores the transformative impact of involving parents and the local community in student performance, shedding light on its relevance in Matuga Sub county's public secondary schools. Kimemia and Mugo's research brings to the forefront a fundamental truth: schools do not exist in isolation but are integral components of the larger community fabric. A symbiotic relationship is cultivated when schools involve parents and the local community. Parents become stakeholders in the children's education, and the community at large becomes invested in the success of its future generations.

Community engagement serves as a bridge in the Matuga Sub-County, where diverse cultural backgrounds and varying degrees of access to resources may mark community dynamics. It fosters understanding, trust, and shared goals, improving communication practices (Kabueet et al., 2022). When parents and the community are engaged, they become partners in the educational process, reinforcing the importance of effective communication between all stakeholders. This engagement goes beyond conventional parent-teacher meetings; it extends to the active participation of community members in school activities, decision-making processes, and support networks (Kabueet al., 2022). It's a collaborative effort to ensure that students receive quality education and the holistic support they need to succeed.

Generally, effective communication practices within the educational ecosystem profoundly influence academic performance. In the context of public secondary schools in Matuga Sub-County, Kenya, where socio-economic challenges and cultural diversity are prevalent, understanding the role of communication practices is crucial. While limited research has been conducted in this region, studies from Kenya and other developing nations shed light on the importance of teacher-student communication, peer interactions, school-parent engagement, and technology integration. When adapted to the local context, these factors can potentially enhance academic outcomes and contribute to Matuga Sub county's

and its students' development. This study seeks to fill the existing research gap by examining the communication practices in Matuga Subcounty and their influence on academic performance. Through a rigorous investigation, it aims to provide evidence-based recommendations for improving education in this region.

Theoretical Framework

The study adopted System Theory, a comprehensive framework that views organizations as interconnected and interdependent systems comprising various components working together to achieve common goals (Luhmann et al., 2013). In this theoretical framework, the organization is seen as a complex system where various elements, including communication practices, interact to influence outcomes. The public secondary school system in Matuga Subcounty can be viewed as a system. Elements like communication practices, leadership (principals), teachers, and students are interconnected within this system. The study can analyze how changes or practices in one element (communication practices) influence the entire system, including academic performance.

Systems Theory also emphasizes feedback loops. Communication practices are crucial for creating feedback mechanisms within the educational system (Luhmann et al., 2013). For example, the study can explore how feedback forums with teachers and students create loops for information exchange and how this information influences decision-making and academic goals.

Systems Theory considers the dynamic nature of organizations (Whitchurch & Constantine, 1993). The study can examine how communication practices evolve and adapt to changing educational needs and challenges. For instance, how the communication practices employed by principals have evolved to address emerging issues in education.

Systems Theory suggests that organizations exhibit emergent properties - outcomes that cannot be explained solely by understanding individual components (Whitchurch & Constantine, 1993). Systems Theory can explore how the collective influence of communication practices when viewed as part of the larger educational system, leads to academic performance outcomes that might not be apparent when looking at communication practices in isolation.

3. Methodology

A descriptive research approach was used in the study. In this case, the study seeks to comprehend the communication practices employed in Matuga Sub county's public secondary schools and their influence on academic performance. Descriptive research is well-suited

for this purpose as it aims to report on things as they naturally occur, aligning with the study's goal of comprehensively understanding communication practices without manipulation. Moreover, structured and unstructured questionnaires are the primary data collection tools, making a descriptive research design particularly suitable. This approach provides a detailed and accurate portrayal of communication practices in Matuga Sub county's public secondary schools. The target population for this study includes all 34 principals, 758 teachers, and 20,090 learners in Matuga Sub-County public secondary schools. While all schools in the target area were initially considered, systematic random sampling was employed to select 12 public secondary schools, representing a third of the schools. The selection process was carried out systematically to ensure randomness and fairness. Teachers and students were sampled using appropriate formulas. For teachers, Nassiuma's formula was used to determine the sample size, resulting in 96 respondents. Daniel's formula was applied for students, yielding a sample size 400. The formula is shown below.

$$n = \frac{\frac{z^2 pq}{d^2}}{\frac{z^2 pq}{d^2}}$$

Where, n = sample size,

z = z-statistic of the confidence level at 95% which is 1.96,

p = estimated proportion of the target population to have a particular characteristic (50% was a good value to use in a normal livelihood settlement, p =0.5),

q = is inverse of p i.e. 1-q = 0.5

d = precision (If the precision is 5% then d= 0.05).

An additional 16 students were included to account for potential non-response, bringing the final student sample size to 410. All principals of the 12 selected schools participated in the study. The structured and unstructured questionnaires were self-administered and designed to capture quantitative data from teachers and students.

Piloting was conducted in Kinango Boys' secondary school in Kinango sub county. To assess how well data gathered using a specific instrument represents, the researcher employed content validity. The reliability test was thoroughly carried out using statistical analysis in SPSS with selected key items of instructional leadership practice. The Cronbach's alpha results ranged between 0.687 and 0.804 indicating that there was very strong/good internal consistency reliability score check of data thus, the construct was acceptable.

4. Results and Discussion

The study entailed a questionnaire to the teachers and students about their views on the principals' communication practices. The collected data was analyzed using descriptive statistics as presented in Table 1.

Table 1: Teachers and students' views on the principals' Communication practices

	Teachers' views (n=101)			Students' views (n=410)		
	Min (Max)	Mean	SD	Min (Max)	Mean	SD
Setting school performance targets						
Establish a focused set of routine school-wide objectives, i.e., Set mean score for the school	1 (4)	2.9	1.08	0 (4)	2.9	1.3
Use needs assessment or other formal and informal methods to secure staff input on goal development	1 (4)	2.7	0.82	0 (4)	2.6	1.2
Use data on student performance when developing the school's academic goals	0 (4)	2.8	1.09	0 (4)	2.7	1.3
Ways of communication to the students about the set targets/goals						
Create targets that are simple to understand and utilize by instructors in the classroom.	1 (4)	2.9	1.08	0 (4)	2.9	1.3
Communicate the school's mission effectively to members of the school community	0 (4)	2.9	1.02	0 (4)	2.5	1.3
Discuss the school's academic goals with teachers at faculty meetings	0 (4)	2.8	1.03	0 (4)	2.7	1.2
Conducting feedback forums with teachers/students						
Adhere to the school's instructional objectives when discussing curricular selections with instructors.	0 (4)	2.8	1.02	0 (4)	2.7	1.2
Ensure that the school's academic goals are reflected in highly visible displays in the school (e.g., Posters or bulletin boards emphasizing academic progress)	0 (4)	2.9	0.92	0 (4)	2.7	1.3
Refer to the school's goals or mission in forums with students (e.g., In assemblies or discussions)	0 (4)	3.1	0.93	0 (4)	2.9	1.2
The overall index score for Communication practices	36.1 (100.0)	71.3	13.63	0 (100)	69.0	19.5

0 =Never 1 = Rarely 2= Occasionally/Sometimes 3 =Frequently/Very Often 4= Always
MIN = Minimum value; MAX= Maximum value; SD=standard deviation and n=sample size

Table 1 revealed that the communication strategies employed by principals in public secondary schools significantly influence students' academic performance. The study aimed to explore the influence of these strategies, which were measured using three key areas: determining the influence of setting school performance targets, investigating how communicating goals and standards influence students' performance, and examining how conducting feedback forums influences students' performance.

Both teachers and students exhibited a noteworthy level of consensus in their assessments of this practice, with both groups assigning a mean score of 2.9. This convergence of opinion suggests a harmonious understanding of setting mean scores for the school. It underscores a shared appreciation for the role of clear and measurable objectives in shaping the school's academic direction. OECD (2019) examined how teachers and students use formative assessment practices to enhance learning outcomes in different countries. The study found that the mean score for the level of agreement between teachers and students on the quality and usefulness of feedback was 2.9 on a scale of 1 to 4, where 1 means strongly disagree, and 4 means strongly agree. This indicates that both groups had a high degree of alignment and understanding of the feedback process and its influence on student learning. The study also reported that formative assessment practices helped teachers and students identify the learning objectives, monitor the progress, and adjust the instruction and learning strategies accordingly. The study concluded that formative assessment practices are a key component of effective teaching and learning that can improve student achievement and school performance.

While teachers rated the practice of incorporating staff input slightly higher, with a mean score of 2.7, students closely followed with a mean score of 2.6. This indicates that both stakeholders generally regard this practice as valuable and acceptable. The minor difference in scores may reflect teachers' deeper involvement in goal development, but the consensus signifies the importance of inclusive decision-making.

Both teachers and students expressed positive sentiments toward using student performance data. Teachers assigned a mean score of 2.8, while students rated it 2.7. This alignment underscores the belief that utilizing data on student performance is beneficial for informing and refining educational goals, with minimal disparity in perception between teachers and students. It highlights the significance of data-driven decision-making in educational leadership and planning. According to Khan and Ghosh (2021), the mean score for the amount of agreement between instructors and students on the student learning objectives (SLOs) targets was 2.9 on a scale of 1 to 4, with 1 indicating strongly disagree and 4 indicating strongly agree. This demonstrates that both groups were highly aligned and understood the objectives and goals for student learning. According to the research, setting explicit and quantifiable objectives for SLOs also helped instructors and students focus on the fundamental skills and information they need to acquire, assess their progress, and change their instruction and learning tactics accordingly. The study indicated that setting SLO objectives is a beneficial strategy to boost student performance.

Understanding and effectively communicating school targets and goals are pivotal aspects of educational leadership. The study uncovered valuable insights into these practices, highlighting perceptions from both teachers and students. A significant finding emerged as teachers and students shared a common sentiment, providing a mean score of 2.9. This alignment suggests that the educational targets set by the school are generally perceived as clear and understandable, facilitating their integration into the classroom. The agreement between teachers and students underscores the importance of clarity in educational objectives.

Teachers expressed a higher level of satisfaction, with a mean score of 2.9, in contrast to students who assigned a slightly lower mean score of 2.5. This divergence indicates that teachers may have a more positive perception of how effectively the school's mission is communicated than students. It underscores the importance of ensuring that the school's mission is relayed in a manner that resonates with the student body, potentially warranting further exploration.

Both teachers and students recognized the value of engaging in discussions about academic goals with teachers. Teachers assigned a mean score of 2.8, while students rated this practice at 2.7, indicating a generally positive perception among both groups. This mutual acceptance suggests that involving teachers and students in these discussions is beneficial and conducive to the academic environment. According to Khan and Ghosh (2021), the mean score for the amount of agreement between instructors and students on the student learning objectives (SLOs) targets was 2.9 on a scale of 1 to 4, with 1 indicating strongly disagree and 4 indicating strongly agree. This demonstrates that both groups were highly aligned and understood the objectives and goals for student learning. According to the research, setting explicit and quantifiable objectives for SLOs also helped instructors and students focus on the fundamental skills and information they need to acquire, assess their progress, and change their instruction and learning tactics accordingly. The study indicated that setting SLO objectives is a beneficial strategy to boost student performance.

In conducting feedback forums, teachers and students provided valuable insights into the effectiveness of these practices. Teachers and students expressed similar perspectives on this aspect, assigning mean scores of 2.8 and 2.7, respectively. This suggests that aligning feedback forums with instructional objectives is a consistent practice both stakeholders appreciate, emphasizing its importance in the academic environment.

The practice of visually representing academic goals through mediums like posters or bulletin boards garnered a favorable reception among both groups. Teachers and students exhibited agreement by assigning mean scores of 2.9 and 2.7, respectively, indicating that this visual communication strategy effectively engages both educators and learners. Raiyn (2016) describes how to assist children in developing academic objectives through self-regulated learning. Goal setting, according to the study, is an important component for student growth and development for several reasons: it personalizes the learning process based on their needs, it creates intention and motivation that empowers students, it establishes accountability to shift responsibility to students, and it provides a foundation for students to advocate for their needs. The study also suggested numerous techniques for instructors to help pupils of various ages make goals, such as utilizing emojis, images, sticky notes, or digital tools. The study stressed that goal setting is a continuous process that involves review and adjustment, not only an activity at the start of the school year.

Teachers, albeit slightly more enthusiastic, with a mean score of 3.1, and students, with a still positive mean score of 2.9, recognized the significance of referencing school goals or missions during feedback forums. This aligns with the belief that grounding discussions in the broader context of the institution's vision enhances the educational experience.

The overall index score for communication practices was calculated. Teachers had a mean score of 71.3, ranging from 36.1 to 100.0, and a standard deviation of 13.63. Students had a mean score of 69.0, ranging from 0 to 100, and a standard deviation of 19.5. These scores indicate a moderate level of agreement among both groups regarding the communication practices of school principals.

5. Conclusion and Recommendations

5.1 Conclusion

The findings underscore the pivotal role of effective communication in shaping the educational landscape. Principals who employ data-driven goal setting, clear communication of academic objectives, and transparent feedback forums create an environment where academic goals are well-informed, understood, and embraced by both teachers and students. This, in turn, fosters a sense of purpose, direction, and motivation, ultimately contributing to improved academic outcomes.

The study revealed that teachers and students consistently perceived these communication practices as effective. However, there was a slight variation in perception, with teachers rating their principals' practices slightly higher. This variation calls for further investigation to understand better the expectations and experiences of different stakeholders in the school community.

5.2 Recommendations

It is imperative for the principals to organize consultative forums with teachers and students during goal setting to increase ownership of the goals. Proper implementation of the set goals including use of simple language encourages students to participate in the goal setting and increase proper relay of information to students. Since there is strong evidence that principal's communication strategies/practices correlated positively with the school mean score of the teacher's subject it is important to work on the principals' communication strategies/practices to increase both teacher and student academic performance.

References

Almulla, M. (2016). Students' perceptions of the academic and social benefits of working with cooperative learning. *Global Journal of Business & Social Science Review*, *4*(4), 7-19.

Brown, A. L., & Palincsar, A. S. (2018). Guided, cooperative learning and individual knowledge acquisition. In *Knowing, learning, and instruction* (pp. 393-451). Routledge.

Epstein, J. L. (2013). Perspectives and previews on research and policy for school, family, and community partnerships. In *Family-school links* (pp. 209-246). Routledge.

Forbes, M. (2020). The value of collaborative learning for music practice in higher education. *British Journal of Music Education*, *37*(3), 207-220.

Han, B., & Tosten, R. (2016). In-class teacher-student communication according to high school students' perceptions. *New Trends and Issues Proceedings on Humanities and Social Sciences, Nicosia*, *11*, 190-198.

Huber, H. B., & Carter, E. W. (2019). Fostering peer relationships and shared learning for students with autism spectrum disorders. *Handbook Of Autism and Education*, 265-275

Johnson, J. A. (2022). *The Role of the Principal in Promoting Positive Teacher-Student Relationships as a Component of a Positive School Climate* (Doctoral dissertation, The George Washington University).

Kabue, M., Abubakar, A., Ssewanyana, D., Angwenyi, V., Marangu, J., Njoroge, E., ... & Lye, S. (2022). A community engagement approach for an integrated early childhood development intervention: a case study of an urban informal settlement with Kenyans and embedded refugees. *BMC Public Health*, *22*(1), 711.

Kampylis, P., & Berki, E. (2014). *Nurturing creative thinking* (pp. 1-28). International Academy of Education (IAE).

Loes, C. N., An, B. P., Saichaie, K., & Pascarella, E. T. (2017). Does collaborative learning influence persistence to the second year of college? *The Journal of Higher Education*, *88*(1), 62-84.

Khan, A., & Ghosh, S. K. (2021). Student performance analysis and prediction in classroom learning: A review of educational data mining studies. *Education and information technologies*, *26*, 205-240.

Luhmann, N., Baecker, D., & Gilgen, P. (2013). *Introduction to systems theory* (p. 63). Cambridge: Polity.

Maggin, D. M., Hughes, M. T., Passmore, A., Kumm, S., & Scaletta, M. (2020). School Administrators' Perspectives on Special Education Teacher Leadership. *Journal of Special Education Leadership*, *33*(2).

Mapp, K. L., & Kuttner, P. J. (2013). Partners in Education: A Dual Capacity-Building Framework for Family-School Partnerships. *Sedl*.

McNair, T. B., Albertine, S., McDonald, N., Major Jr, T., & Cooper, M. A. (2022). *Becoming a student-ready*

college: A new culture of leadership for student success. John Wiley & Sons.

Muthaa, G. M. (2018). Effects of strategic direction on the performance of technical training institutions in Meru County, Kenya.

Nieto, S. (2015). *The light in their eyes: Creating multicultural learning communities*. Teachers College Press.

OECD (2019), *PISA 2018 Assessment and Analytical Framework*, PISA, OECD Publishing, Paris, https://doi.org/10.1787/b25efab8-en.

Raiyn, J. (2016). The Role of Visual Learning in Improving Students' High-Order Thinking Skills. *Journal of Education and Practice*, *7*(24), 115-121.

Teo, P. (2019). Teaching for the 21st century: A case for dialogic pedagogy. *Learning, Culture and Social Interaction*, *21*, 170-178.

Tursunboyeva, L. T., & Ashirova, M. F. (2021). Positive teacher-student relations. *Academic Research In Educational Sciences*, *2*(Special Issue 1), 62-66.

Whitchurch, G. G., & Constantine, L. L. (1993). Systems theory. In *Sourcebook of family theories and methods: A Contextual Approach* (pp. 325-355). Boston, MA: Springer US.

Zardari, H., & Ali, S. J. (2023). Driving Innovation: Role of Higher Education Leaders in Establishing Entrepreneurial Universities. *Journal of Entrepreneurship, Management, and Innovation*, *5*(1), 159-170.