

# The Role of Effective Learning Environment in Promoting Student Education in Koidu Secondary School, Koidu City, Kono District, Sierra Leone

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**Abstract:** This research was carried out to explore the critical role of an effective learning environment in promoting students education among secondary schools in Koidu city Kono District. The dissertation emphasis both the physical and psychological dimensions that contribute to optimal learning outcomes. It highlights the factors responsible for an effective learning environment and the challenges. In this research work, a sample of twenty (20) teachers and two hundred and fifty (250) students were collected by means of simple random sampling techniques from one secondary school in Koidu City, Kono District.

The research instrument used for the study was the survey research design questionnaire titled: Learning Environment and Student Education Questionnaire (LESEQ). The data obtained was analyzed. Some of the findings of the study was that the physical environment, emotional climate and teachers' instructional practices of the school contributes a lot in promoting students education. It was therefore recommended that there is need for schools to work on; physical infrastructure, teacher's capacity, invest in educational technology, foster emotional support systems and create culturally relevant teachings in the school. This study concludes with suggestions for further studies.

**Keywords:** Learning Environment, Promoting, Education, Physical and Psychological Dimension, Emotional Climate and Instructional Practices.

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## I. INTRODUCTION

Education remains an essential component of the growth of society as well as the development of individuals. A positive learning setting serves an integral part in determining students' academic performance. Based on current research, variables related to classroom structure, interactions between teachers and students, and access to instructional materials greatly influence pupil achievement (Smith & Johnson, 2023). This study explores the role of an effective learning environment in enhancing students' academic performance and overall well-being.

The significance of developing an efficient learning environment in advancing student education has come to light more and more in recent years. Students' academic performance and general growth can be significantly impacted by how they interact with their environment.

Several studies have demonstrated that a supportive learning environment can improve student performance while also encouraging good attitudes toward education and lifetime learning. One of the most critical areas of educational research is how an efficient learning environment may support students' education. The National Centre for Education Statistics (NCES, 2019) affirms that a classroom's physical environment, which includes elements like lighting, seating arrangement, and classroom design, can significantly affect how well students learn. The actual location where students learn is one of the most essential elements of a successful learning environment. Studies have indicated that classrooms with enough ventilation and lighting might enhance students' focus and general health. Additionally, adding natural features like plants and light can produce a serene and motivating environment.

In a study conducted, it reveals that students in classrooms with adequate furniture and enough natural light showed higher levels of participation and motivation compared to students in traditional classrooms (Barret et al. (2015). Also, Archer et al. (2017) found out that positive teacher-student relationships and an inclusive environment for learning were vital features in promoting student learning and achievement.

Furthermore, socioeconomic inequality, cultural diversity, and learning preference can all make it more challenging to create and execute learning environments that meet the various needs of students. Developing productive learning settings that encourage cooperation, critical thinking, and creativity is made more difficult by the current trend towards digital learning and distance education.

Depending on the quality of the infrastructure facilities, resources available, and assistance offered to students, a dependent on technology can either improve or worsen the educational setting. To address these hindrances, a complete and methodical procedure that encourages cognitive learning, social, emotional, and physical components is required.

The physical environment and the resources that are available in the school, contributes significantly to the motivation, participation, and achievement of the students in that school (Heilweil 2019). This highlights the importance of creating effective learning environments that support students' education and overall well-being. The students are expected to write the same public examination at the end of their junior secondary school (JSS) and their senior secondary school (SSS).

Koidu Secondary School is a leading higher educational institution in Koidu city, Kono district, with a large student population. The school has a credit in quality education to its students, which pave the way to producing successful graduates. Nevertheless, the learning environment at the school is vital in determining the achievements of the students. A supportive environment can inspire students to learn, develop their academic success, and general well-being. It is, therefore, crucial to assess and enhance the learning environment at Koidu Secondary School.

#### ➤ *Aim and Objective of the Study*

The study is to investigate the characteristics and components of an effective learning environment and its influence on student educational outcomes. The study intends to identify the best methods and practices that educators and policymakers can implement to create and sustain an effective learning environment that promotes academic excellence and holistic development among students.

Specifically, the study was sought to achieve the following objectives:

- To evaluate the physical environment in Koidu Secondary School (KSS)

- To assess the emotional climate in Koidu Secondary School (KSS).
- To analyze teacher's instructional practices in Koidu Secondary School (KSS).

#### ➤ *Research Questions*

The research questions for this study are:

- To what extent does the physical environment of Koidu Secondary School (KSS) promote students' learning?
- How does the emotional climate affect students' learning in Koidu Secondary School?
- To what extent do teachers' instructional practices support students' learning in Koidu Secondary School?

## II. LITERATURE REVIEW

Education is proven by many studies to be the foundation with which the physical and technological developments rest upon. Many countries of the world have adopted education as an instrument for national development, which Sierra Leone, is not an exception. Therefore, governments, communities, private organizations and individuals have established educational institutions with a view of training the citizens for the development of the nation's physical and human resources (Aldana, A., & Byrd, M. 2015). One of the objectives of education in Sierra Leone is to prepare the young ones to face future challenges and develop them to meet the nation's manpower requirements. The educational terrain is frequently developing, and the environment in which students learn has garnered increasing attention as a critical factor influencing academic success. An effective learning environment is characterised by its ability to foster engagement, motivate students, and support diverse learning styles.

The literature indicates that the components of a learning environment extend beyond mere physical attributes; they comprise psychological, and emotional factors as well. By examining the various components that go into creating a productive learning environment and their consequences for student education, this literature review seeks to synthesise these findings. Through an analysis of current developments in this field, the review will establish a foundation for comprehending how successful learning environments can raise academic standards and encourage students to pursue lifelong learning.

Building an effective learning environment is very vital for enhancing students' education and promoting their learning outcomes. In this chapter, various components that contribute to creating a conducive learning environment, which includes physical, social and psychological factors will explore. Also, the chapter will discuss the role of an effective learning environment on students' engagement, motivation and general academic performance.

#### ➤ *Concept of Learning Environment*

Learning environments can be defined as the context in which learning takes place. It includes physical space, resources, relationships, and cultural context (Baker et al.,

2020). These have been seen as places where people learn, can also include not only physical spaces such as classrooms, schools, but also places of work; blended spaces that combine both physical and digital elements or virtual spaces such as digital platforms. The significance of this concept has been highlighted as educators strive to create spaces conducive to learning (Hattie, 2019).

A save place and conducive space should be provided by the learning environment for learning. Also, opportunities to interact with each other and access resources that help them learn in different ways should be provided for the learners.

The major features of a learning environment are:

- Learning is the main reason of the environment.
- The learning environment should go hand in hand with the goals of the institution.
- The environment of the learning should be safe, conducive and engaging.

#### ➤ *Components of an Effective Learning Environment*

##### • *Physical Environment*

The physical characteristics of learning spaces have a notable impact on student performance and well-being. Classrooms that are designed with adaptability and flexibility in mind can improve student participation and cooperation Barrett et al., (2021). Their research underscore the importance for creating space that promote collaboration, communication, and comfort. Morrison (2021) added that flexible space that allows for cooperation and movement are particularly beneficial. In creating a conducive space for learning the physical environment has a significant role to play. Students learning experiences can also be improved with factors such as classroom resources, classroom design, lighting, and seating arrangement.

##### • *Digital Learning Environments*

Garrison & Anderson, (2020), explains that, with the arrival of technology, digital learning environments have been well known. Learning has been expanded beyond physical boundaries, which allows access to diverse resources and connectivity all because of these environment. Also, online platforms give room for asynchronous and synchronous learning experiences, encouraging universal collaboration Moore, (2022). Alshammari et al. (2022) explore the role of technology in classroom design. Their findings indicate that blending digital tools into the learning environment can enhance various learning methods, making education more accessible and flexible to individual student needs. Their work points to the unavoidability of having technology that supplements traditional teaching methods as part of an effective physical environment.

Educational practices have been transformed due to the implementation of technology into the learning environment. Mishra & Koehler, (2006), emphasizes the need for educators to integrate technology correctly into their teaching methods, this is to enhance student learning.

Well-designed technology improved learning environments can enhance student motivation, encourage personalized learning, and improved educational outcomes proven according to resent studies (Hwang & Chang, 2020; Wong et al., 2021). Nevertheless, a critical component of modern learning environments is the effective use of technology.

##### • *Psychological Environment*

The emotional well-being, cognitive engagement and in the motivation of students, the psychological aspect of the learning environment comes in. It plays a huge role in the life of every student. A sense of safety, support, and belonging is what the psychological dimension is made of. A narrative review by COR (2015) reveal that students understanding of inclusiveness greatly affect their motivation and engagement in learning. A student's sense of belonging, support, and security in a learning environment can be referred to as the Psychological safety. Lee et al., (2022) highlight that classrooms encouragement and emotional safety lead to high student engagement and readiness to join in class discussions. Students who feel encouraged are more likely to take academic challenges, resulting in an in-depth learning and exploration.

In promoting student participation and engagement psychological safety is very essential and necessary when it comes to educational settings. Higher levels of student collaboration, creativity, and overall academic achievement can be traced to classrooms that encourage physiological safety (Moolenaar et al., 2020; Rojas-Drummond et al., 2018). Creating an effective learning environment must be a place where students feel motivated, encouraged, valued, and supported.

##### • *Social Environment*

The relationships and interactions among students, and between students and teachers is what the main social climate of a learning environment is made up of.

##### ✓ *The Teacher - Student Relationships*

The teacher-student relationship when it is positive, it goes a long way to promote student learning and motivation. Roorda et al. (2019) organised a meta-analysis showing that supportive and encouraging relationships with teachers contribute tremendously to students' participation and academic outcomes. Likewise, Wong et al. (2022) highlight the significance of establishing caring, respectful, and responsive relationships to encourage effective learning climates.

##### ✓ *Peer Collaboration*

The essential aspect of the social environment is collaborative learning. Johnson and Johnson (2019) highlight that cooperative learning methods encourage student participation and help to enhance social and interpersonal skills development. Their findings suggest that structured activities where students work together positively influence academic performance and foster a sense of community within the classroom.

### ➤ *Impact of Learning Environment on Academic Performance*

The Impact of Learning Environment on Academic Performance is that it helps in shaping students' academic experiences and outcomes. It encompasses various elements, including physical space, classroom dynamics, instructional methods, and emotional climate. According to different studies, a positive learning environment leads to better cognitive development, higher motivation, and improved academic achievement according to Taylor & White, (2023). On the other hand, any learning environment that is lacking in some of, or in all of these elements mentioned is considered as an obstruction to learning. Such, as inadequate classrooms design, negative social interactions among learner, and among learners and their instructors, poor infrastructure and distraction.

### ➤ *Challenges in Creating an Effective Learning Environment*

It is necessary to create an effective learning environment because it improves students' learning outcomes. Nevertheless, there have been various challenges preventing this process. These include limited funding for adequate infrastructure, overcrowded classrooms, student-student relationships, student –teacher relationship, leadership style, misuse of technology, and cultural responsiveness. The current study throws more light on these issues, providing background to the consequences and possible solutions. The benefits of an effective learning environment is widely known, still there are challenges. Inadequate learning opportunities across various schools can be as a result of variability in resources (Massey & Denton, 1993). Regular changes in educational policies can interrupt the continuation of effective learning environments, hence affecting student performance.

#### • *Limited Funding for Adequate Infrastructure*

Limited funding for educational infrastructure remains a significant obstacle when it comes to creating positive learning environments. Research conducted by R. M. Dhanapala and Rajarata (May 2021) on “The effect of learning environment on academic performance from students' perspective “It has been observed in literature related to ESL context that less attention has been placed on learning environment. However, the available studies done on learning environment have shown prospective benefits on different variables in the area. The paper presents some of the findings of a study of which learning environment is a significant component. This study is a survey of student perspectives on the learning environment which include areas convenience of classroom facilities, availability of technology and other resources, availability of language laboratory facilities, and convenience of library facilities. The sample of the study comprised selected students of Science-based and Non-science based faculties of Metropolitan universities of Sri Lanka. The data were collected online using a Google Form and were analysed with SPSS software. Results indicated that students of Non-science based faculties need improvements in most of the variables while Science-based faculties need improvements in selected cases particularly library facilities as per students' perspectives.

This research is related to this study because it centers on the learning environment which is key is determining the students' academic performance.

Khan (2023) carried out a research on “An Investigation into the effect of learning environments on academic performance among higher secondary students in Dera Ghazi Khan”. This study focused on the private sector and the infrastructure the schools provide. The learning environment seemed conducive for learning. It also assessed the level of pedagogy of the teachers which gave an added advantage to the academic performance of students. The research design used for the focus group and observation. The findings of this study show that Private institutions offered better learning environments, leading to higher student performance. The research gap observed was that the study focused on general perceptions without analyzing specific environmental factors like technology integration or teacher-student interactions and that is the gap this research intends to fill.

Another research conducted by Shamaki (2015) on the “Examination of how classroom conditions affect mathematics achievement in Yobe State, Nigeria”. The survey research design was used with a sample size of 150 students, using a random sampling technique as the suitable sampling technique. The findings of this research showed that Students in well-equipped classrooms performed significantly better than those in poorly equipped ones. But the research gap observed was that the research didn't explore long-term impacts or variations across different subjects and regions and that is what this research intends to address.

Yusuf, M.O., & Adigun, J.O. (2020), carried out research on "The Influence of School Environment on Students' Academic Performance in Ilorin East Local Government Area of Kwara State." In this study, various elements of the school environment were explored, which includes infrastructural facilities and teacher quality, and how it affect student academic performance. The results shows a strong relationship between a well-equipped schools and higher student achievement. The study rightly links the physical and human resource aspects of the learning environment to educational performance highlighting the need for complete school improvement. The scope of the study is limited to a particular geographic area which may not capture different educational challenges and diverse regions thus, the need to fill up the gap with this current research.

#### • *Overcrowded Classrooms*

Research conducted by Fraser, B.J. (2022) on the “Classroom Learning Environments: Retrospect, Context, and Prospect.” The research paves the way for a comprehensive summary of research which is on classroom learning environments, pointing out the importance of student conceptions in designing educational outcomes. The research shows that positive learning environments are linked to higher student achievement and motivation. The sampling technique used was the random sampling, and the survey research design was also used. This research is related to the topic because the foundational research underscores the



importance of assessing and improving classroom environments to enhance student learning, which directly aligns with the focus on effective learning environments. The research gap observed was that the study primarily focuses on general educational settings and lacks specific insights into diverse cultural or socioeconomic contexts and that is the gap this present study intends to fill.

- *Student -Student Relationships*

The learning environment plays a vital role in shaping the educational experiences of the students. The interactions, particularly between students can have a significant influence on the academic performance, emotional well-being and social development. Student relationships play a significant role in shaping educational outcomes. When the learning environment is supportive, it can enhance increase, motivate and promote a sense of belonging, which are essential for academic success. Nevertheless, a negative student-student relationship, such as bullying, social isolation, group work and collaboration challenges, communication barriers, peer pressure and social dynamics, and emotional empathy. All these, presents' challenges that can undermine the effectiveness of a learning environment. Smith et al., (2020) states that bullying remains a grave concern in the educational setting. It negatively affects the victimised students' emotional well-being and academic performance. Also, bullying can create an environment of fear, inhibiting positive interactions among peers, (Kowalski et al. 2019).

- *Student-Teacher Relationship*

One of the key areas when it comes to the issue of learning environment is the student-teacher relationship. This is because it is the foundational to the educational process, there by influencing student engagement, academic performance, and general well-being. Recent literature has highlighted a variety of challenges impacting these relationships, especially in the context of an effective learning environment. It is very essential to have student-teacher relationships when dealing with things that promote the general education of students. Research consistently underscores the positive correlation between strong student-teacher relationships and student success. According to Pianta (2006), positive relationships with teachers can lead to improved behavioural, emotional, and academic outcomes for students. However, despite the acknowledged importance of these relationships, numerous challenges persist in establishing and maintaining them, particularly in diverse and dynamic classroom settings.

The ability of a teacher to provide a positive mentorship significantly impact on the learners' behaviour and academic performance. It is significant that a peaceful, serene and tranquil atmosphere provided by the teacher boosts the readiness of the students to learn. If a teacher is hostile in the classroom there are possibilities that some students may withdraw from lessons or be inattentive. According to Boynton and Boynton (2005) in Varga (2017), when the foundation for a good relationship is lacking, it negatively affects students' behaviour. Such students resist rules and procedures, and they will neither trust teachers nor listen to what they have to say if they sense teachers

do not value or respect them. In fact, some students may decide not to attend classes. The persistent absenteeism could be attributed to the tutors' sharp rebuke, lack of understanding, negative reactions, and unbecoming speech. Varga (2017) indicated that teachers have a responsibility to welcome all students and create an air of respect between them so that more positive interactions can be established.

Skinner and Greene (2008) further maintained that if a student knew he had control, there would be several positive academic results. This would range from various academic activities, setting of achievable goals, increased focus on tasks and more desire to study. With this, students are encouraged to learn with enthusiasm, vigor, enjoy challenges and ready to seek for assistance when the need arises. Poor management of classroom situation can create an issue in the teacher-student relationship. The teacher must be a good role model in all ramifications. Santrock (2004), a renowned psychologist, identified some relevant components of effective teaching personality. These are: openness, either imaginative or practical; conscientiousness, whether organized or disorganized, extraversion' either sociable or retiring; agreeableness, whether soft-hearted or ruthless; and emotional stability, either calm or anxious. All of these are significant for a productive, profitable learning and relationship between the teacher and the student. Vicki Nishioka, a senior researcher with Education Northwest who studied teacher-student relationships disclosed that sometimes teachers do not understand the importance that their relationship with each student has on the student's identity and sense of belonging. Students, most times need tutors who could affirm their responses to teaching activities. An observation of learners in the elementary classes would greatly depict the importance and relevance of teachers to the learners. A learner may refuse to attend class if the teacher punishes him unjustly. In some cases, there are learners who affirmed that what their teacher taught them was right even when it was wrong. A positive and strong teacher-student relationship act as protection against the potentially adverse effects that insecure environment can have on students' academic achievement and provide room for sharing opinions, which boosts their involvement, motivation and interest to participate in the class activities (Baker, Grant, Morlock, 2008; Koskima and Rapeli, 2015; Wentzel, 2016). Students who perceive that their teachers are caring, attentive, fair and understanding are expected to be more motivated to interact, discuss and participate in class activities. This brings them into contact with other ideas and thoughts, which stimulate their willingness to participate or get involved in other activities in the community.

➤ *Challenges in Student-Teacher Relationships*

- *Communication Barriers*

One of the primary challenges in student-teacher relationships is effective communication. Many studies indicate that miscommunication can lead to misunderstandings and conflicts (Murray & Zentall, 2018). Teachers often struggle to connect with students who have

different communication styles or cultural backgrounds, which can create barriers to understanding and trust.

The way a teacher communicates plays a significant role in the life of the learners. There must be appropriate responses from the instructors even if the students exhibit deviant behaviour. Skinner and Greene (2008) revealed that learners need to cultivate a sense of control by possessing a structured classroom environment and a caring as well as trusting relationship with their teachers. If the classroom is tensed with no practical activities to incorporate the learners adequately in the teacher-learning period, some of them may invariably disrupt the lessons. This necessitates the need for effective application of understanding, shrewdness, awareness and appreciation on the part of the teachers.

Also, effective communication plays an important role in building students' behaviour and high standard education. Teacher's skills and ways of communication motivate and enhance the students' ability to learn effectively. It also plays an important role in developing connection between students and teachers. David (2015) revealed that a positive rapport between teachers and students creates a healthy environment for good education. Teacher's non-verbal and verbal means of communication are reflected in the students' behaviour, knowledge acquisition and ethics. Therefore, non-verbal communication from the teacher damages the behaviour of students and eventually led to depression on the part of students (SngBee, 2012). Good and effective communication assists a well-trained teacher to develop good relation with students and also enhances the student's interest in a particular subject. Bajracharya (2015) submitted that inadequate number of teachers and teacher's poor communication skills are the major factors that have led students to abandon a particular subject(s) at a certain class. Khan, Khan, Zia-Ul-Islam and Khan (2017) also stated that the success of students is directly related to the effective communication of the teachers. It is therefore very important and necessary that the teacher communicates with students in an effective manner.

#### • *Power Dynamics*

The inherent power imbalance in student-teacher relationships can also create challenges. According to Wentzel (2010), students may feel intimidated by their teachers, which can inhibit open discourse and hinder relationship-building. This power dynamic is particularly pronounced in high-stakes educational environments where grades and evaluations dominate.

It is important for a teacher to build and maintain positive teacher-student relationship so that students might be fully engaged in the classroom. Some teacher-student relationship variables such as trust, communication and alienation are therefore keys in establishing a very strong relationship among the students in the classroom. Mutual trust between students and teachers is strongly required as a foundation in developing and expanding their relationship and social network (Baruch, Arnon and Rebecca, 2015).

Trust in the willingness or intention to make one vulnerable to the actions of others (Durnford, 2010). Students who have trust in their teachers are usually more focused on their work and learn more effectively (Kurmaningsih, Yuniarti & Kim, 2012). According to experts, 63% of students who participated in the study stated that they trusted their teachers because they perceived them as being their parents, because they have the ability to transfer knowledge, establish good rapport with students, and have ability to guide students appropriately. Roads (2006) agreed that building genuine and trustworthy relationships between teacher and students is pivotal in student capacity to learn.

Also, in order to build trusting relationships with students, kindness on the part of teacher, sense of humour, caring and interest in students as human beings are required (Romero, 2010; Kosnick and Beck, 2011). In addition, Hyman and Snook (2001) mentioned that being mocked and rejected by classroom mates leads students to suffer from alienation from alienation which is related to depression, hopelessness, stress and self-harm conduct or risky behaviours (Kathy, 2015; Fleming, Dixon and Merry, 2012). They submitted that these impede students' explorative endeavours in the classroom which negatively affect the teaching learning process. It also makes such students feel that they do not belong to the environment where they find themselves. Hyman and Snook (2001) also reported that environmental climates make alienation become worse in students. Kanya and Burgess (2007) stated that taking a seat at the back angle of the classroom constitutes a safe place for alienated students as they feel safe from being bothered by other students in the classroom. Alienated students are extremely quiet and self-isolated with limited interaction, acting as being busy doing something, withdrawing from class activities, and preferring to stay alone. These also are features of an introvert. Various studies (Jimenez & Rose, 2010; Wubbels, Brekelmans, den Brok, Wijsman, Mainhard and van Tartwijk, 2014) have reported that teachers who build better connection with students also help students to gain better learning achievement. This better connection or relationship with students can be illustrated by the ability of teachers to resolve the alienation issue (Murray & Zvoch, 2011). Several strategies have been identified for handling alienated students in the process of teaching and learning of English Language in senior secondary schools. These include engaging the alienated students in intense communication, giving them encouragement and empowering class mates as working peers. All these attempts supported and motivated alienated students to develop their involvement in class activities (Kolawole and Oluwatayo, 2005; Adeyemi, 2018). Research indicates that 13.2 million students dropped out of schools in Nigeria in 2019 (UNICEF, 2019). This situation is not peculiar to Nigeria alone, but appears to be widespread. In a study conducted by Willms (2013) it was found that 25% of students in the 43 countries studied reported a low sense of belonging and 20% of them reported low participation in class activities. Student alienation is a serious problem that gives educators serious concern, as such, students are more likely to struggle academically, drop out of school and have

behavioural problem in the society (Baker, Grant and Morlock, 2008). Evidence regarding the effect on academic achievement abounds. Researchers such as Gonzalez and Padilla, (1997) and Wentzel and Brophy, (2014) found a positive relationship between student alienation and academic achievement. In the same vein, a study of 214 Mexican American High School by Gonzalez and Padilla (1997) found that the sense of belongingness was significantly associated with the Grade Point Average (GPA) of students in school. Burbekova (2021) therefore submitted that a disconnected student can be recognized or identified by a teacher through observation. Teachers are therefore encouraged to be very observant in the class so as to be able to identify the alienated students in order to assist them manage their feelings and provide practical strategies for creating and maintaining a daily climate that will help each student find positive ways to feel connected, valued and appreciated in the classroom. Various studies (Jimenez & Rose, 2010; Wubbels et al., 2014) have shown that teachers who build better connection with students also help students to gain better learning achievement

- *Cultural Differences*

Cultural differences between students and teachers can pose significant challenges as well. As highlighted by Gay (2010), educators who lack cultural competence may inadvertently alienate students from diverse backgrounds. This alienation can result in disengagement, reduced trust, and ultimately, negative educational outcomes.

- *Teacher Burnout*

Another interesting factor to consider when it comes to the challenges of student-teacher relationships is teacher burnout.. Research by Skaalvik and Skaalvik (2017) explains that whenever an educator is under stress, it mostly contribute negatively impact their ability to form constructive relationships with students. Many studies (Brown, 2010; Rimm & Sandilos, 2012) have identified the importance of understanding the development of high-quality teacher-student relationship on students' academic outcomes. Literature also indicates that teacher-student relationship quality predicts students' achievement in English Language (Wentzel, 2016). The quality of instruction delivered in the classroom depends on the quality of teachers, while the interaction between the quality of instruction and the quality of teacher will eventually influence the quality of the students produced as outputs of the learning process (Rimm & Sandilos, 2012). For teachers to produce the quality outputs that are needed in the society teacher-student interaction is a key element in classroom instructional delivery.

- *Leadership Styles*

The effectiveness of a learning environment in promoting student education is deeply intertwined with the leadership styles practised within educational environments.

Leadership is very closely related to the success of learning in school institutions so that the role of school leaders, teachers becomes a central point in this research because school leadership and teachers must be able to

provide new innovations in the learning system and also related to the curriculum of government programs, so that the role of teachers as conveyors of knowledge information also very decisive. According to Hoy (2020) that the teacher is a maker of learning programs, then must also know student behavior, manage learning, time, then record the success/failure of students, then evaluate what needs to be done next (Woolfolk's opinion, this actually not only for teachers, but also still very relevant for universities, because between teachers and lecturers only differ (where to teach and who is the subject). According to Vecaldo (2019) in shaping leadership and major innovations in the education curriculum, teachers offer professional education offerings that shape leadership skills. Teachers also have an essential role in the development of learning systems, between leaders and teachers, in order to create a synergy of performance systems. According to A.E. Nir (2012), teachers tend to show a high commitment to student achievement, especially if they see the difference between achievement and increase the potential for professional prestige them, and give symbolic awards to children and parents as well as school principals/government leaders. To improve teacher learning systems must be able to generate "motivation" for students to learn, as Bigg's (1987) said, there are four motivations that need to be raised in students in an effort to improve, learning systems, including: instrument motivation, social motivation, motivation achievement, and intrinsic motivation. So, the four motivations must be raised first to make changes to the learning system in the classroom. The development of the learning system is also vital, for example by providing training to school leaders, teachers and students, because the modern world learning system cannot regardless of the progress of IT, as Peter argues.

With the advancement of e-learning, managers of educational institutions begin to deal with different activities, requiring the development of new procedures and finding alternatives to overcome emerging challenges that go beyond educational problems Paul (2016). There are several opinions in terms of leadership and management in schools as a basis for concepts. According to Barret and Breyer (2014) leaders must instill enthusiasm in the soul of the teacher and provide effective leadership to motivate teachers then to provide energy (motivation) to students. Based on Wieszorek and Manard (2018) school leaders work to balance their professional and personal lives and are challenged to meet the expectations of their communities to be seen and involved. To meet limited budget conditions, school leaders also maintain responsibilities by building infrastructure, etc., overlapping responsibilities. School leaders should focus on developing relationships and trust among teachers, students and their parents, for development of learning in schools they lead. School leaders in receiving guidance from school supervisors to improve leadership competence in schools. According to Lowery (2018), the benefits of learning general leadership skills apply to supporting school counsellors. School principals must be prepared to work with school counsellors, in the opinion of the above school leaders are also ready to work with school supervisors to improve competencies and learning systems in school institutions and more and more leaders who focus their relationships, their



work, and core learning and the greater the effect on student achievement (Robinson and Rowe 2018). The leader is essentially a subordinate; they must serve. According to Terosky and Reitano (2016), the leader works for the progress of their followers while trying to achieve goals for the organisation. Then, they are required to work for the greater good than those they serve. Leaders should have ethical and moral qualities that enable them to serve as examples for followers in an organisation, including school institutions.

Recent literature identifies transformational, transactional, and servant leadership as prevalent styles used in schools.

- *Challenges of Leadership Styles*

The core problem in leadership and management in schools in several countries, including Sierra Leone, are the same case. According to Abulrasheed, Nyako, Bello and Joda (2016), government policies that are considered failing, and then involving the responsibilities of school leaders, school management does not work well. This, is as a result of lack of community participation (students' parents), and lack of government funding. For targets to be achieved it becomes a collective responsibility not only for the school leaders or management but also for full community participation and funding from the government. And this is a challenge for school leaders to improve the learning system in schools, given that it is a national interest that must be addressed.

The movement towards effective educational implementation requires addressing specific challenges associated with different leadership styles:

- ✓ *Resistance to Change:*

This is one of the significant issues leaders face. They often face resistance from the teachers when initiating new educational methods or leadership pattern, particularly from those staffs that are accustomed to traditional methods (Kotter & Cohen, 2012). Obstacles to the implementation of an effective learning environment can be generated as a result of resistance to change.

- ✓ *Professional Development:*

Continuous professional development is crucial for any leader to attain higher heights. Although due to financial inadequacy, leaders may struggle to provide adequate training aimed at supporting new initiatives, leading to inconsistent implementation of strategies (Guskey, 2002).

- ✓ *Communication Barriers:*

Open communication is not prioritised in Leadership styles. It creates gaps within educational settings, hindering collaborative efforts that are necessary for developing effective learning environments (Fullan & Queen, 2018).

### III. RESEARCH METHODOLOGY

This research work is a descriptive study. The appropriateness of this design is that it permits the researcher to systematically collect data from a population and examine relationships between the learning environment and students'

educational outcomes without manipulating variables (Creswell & Creswell, 2018). This design enables the analysis of how elements such as classroom infrastructure, teacher-student interaction, and emotional support contribute to academic performance. The population of the secondary schools in Kono District is 157. This includes 118 junior secondary schools and 39 senior secondary schools. Coming down to Koidu City the area of the research study it has 10 approved secondary schools, and Koidu Secondary School is one of them.

The target population of this study comprises all students and teachers of Koidu Secondary School in Koidu City, Kono District, Sierra Leone. This includes students from Junior Secondary School (JSS 1–3) and Senior Secondary School (SSS 1–3) levels, as well as the teaching staff actively involved in classroom instruction. The school has an estimated population of over 800 students and 40 teachers across various subject areas. This population is considered appropriate for the study because both students and teachers are directly affected by and contribute to the learning environment, making them key informants in assessing its role in promoting educational outcomes. The total sample size was 270, which comprises of 250 students and 20 teachers selected from Koidu Secondary School. A stratified random sampling technique was used to ensure fair representation of data across different class levels (JSS and SSS) and gender. The student population was divided into groups based on class level first, and participants were then randomly selected from each group. A purposive sampling technique was used for the teachers to choose those with at least two years of teaching experiences, as they are more likely to provide informed responses about the learning environment. The combination of this techniques certifies that the sample is both representative and applicable to the objectives of the study.

- *Sources of Data Collection*

In this study, the researcher employed both primary and secondary methods of data collection to obtain comprehensive and reliable information.

- *Primary Data:*

The Primary data was collected through interviews with the students, teachers, and some stakeholders around the community. Also, by using a structured questionnaire designed for both students and teachers. The questionnaire contained both closed-ended and Likert-scale questions focusing on aspects of the physical, emotional, psychological, cultural and instructional components of the learning environment. The researcher administered the questionnaires by hand in person during the school hours to ensure clarity and direct support where necessary. This gave room for the collection of firsthand information directly related to the research objectives.

Furthermore, the focus group discussion typically involves gathering a diverse group of participants, such as educators, students, parents, and educational administrators, to explore their perspectives on the characteristics and impacts of effective learning environments. The target group



was the students and the teachers. The objective of the research work was the key element that was used. Some of the questions raised for the discussions are:

- ✓ To what extent does the physical environment of Koidu Secondary School (KSS) affect students' learning?
- ✓ How does the emotional climate affect students' learning in Koidu Secondary School?
- ✓ To what extent does teacher's instructional practices influence students' learning in Koidu Secondary School?
- ✓ How does the integration of technology in the learning system affect students' academic performance in Koidu Secondary School?
- ✓ To what extent does the role of cultural responsiveness affect students learning in creating an effective learning environment?
- ✓ What are of the challenges encountered in creating an effective learning environment in the school?

The discussion gave room to open dialogue, and the insights gained from the focus group helped to identify key themes and patterns related to effective learning environments. With the consent of the participants, the conversation was recorded for transcription and analysis.

This method provides rich, contextual information that helped enhance the understanding of the research and supporting the development of actionable recommendations.

#### • Secondary Data:

This is a second - hand information source, and so, the secondary data here was obtained through a review of relevant literature, journals, reports, and educational policy documents related to the learning environment and student ability. Other sources included are; educational research articles, publications by the Sierra Leone Ministry of Basic and Senior Secondary Education (MBSSE), and international organizations such as UNESCO and UNICEF. These sources gave room to the background knowledge and support for the interpretation of the primary data. The combination of both methods ensured a richer understanding of the relationship between the learning environment and students' educational outcomes or performance.

Table 1 The Extent of the Physical Environment of the School Affects Students' Learning.

Statement	SD	D	N	A	SA	Total Response	Percentage
Classroom is well-ventilated	19	23	25	97	86	250	73%
Furniture and space are adequate	18	22	30	75	105	250	72%
School is clean and maintained	21	19	27	88	95	250	73%
Classroom helps concentration	17	16	28	91	98	250	76%

Sources: Research data 2025

#### ✓ Analysis:

The majority of students agreed or strongly agreed that classroom cleanliness, ventilation, and space positively influence learning. Over 70% affirmed that good physical conditions support concentration.

#### ➤ Data Analysis Tools

The descriptive and inferential statistical methods were used to analyze the data collected. For the learning environment, the descriptive statistics methods were used to summarize and present demographic information and responses related to the learning environment. This Include; frequencies, percentages, means, and standard deviations. Pearson's correlation coefficient was employed for inferential analysis because it is a statistical measure that assess the strength and direction of the relationship between the independent variable (the learning environment which comprises of the infrastructural facilities, teaching methods, and students' engagement). And the dependent variable (students' educational performance).

Data was collected and analyzed for both students and teachers based on their perceptions of the learning environment and its impact on their educational performance. It went further to into the connection between the effectiveness of the learning environment and students' academic achievement. This method helped determine the strength and significance of the relationship between variables. The data analysis used to conduct it was the Statistical Package for Social Sciences (SPSS), which facilitated accurate computation and interpretation of results. Tables and charts were used to present the findings for clarity. The conclusions were drawn based on the analysed data to address the research objectives.

## IV. RESULTS

### A. Response Rate:

The research questionnaires were distributed to 250 students and 20 to teachers, all were duly returned and duly filled.

#### ➤ Part One (FOr Pupils)

#### • Research Question One:

To what extent does the physical environment of Koidu Secondary School (KSS) promote students learning?

#### • Research Question Two:

How the emotional climate does affects students' learning in Koidu Secondary School?

Table 2 How the Emotional Climate Affect Students' Learning.

Statement	SD	D	N	A	SA	Total Response	Percentage
Students feel emotionally safe	30	36	10	77	97	250	70%
Respect from teachers/classmates	18	22	31	95	84	250	72%
Confidence to ask questions	20	30	19	83	98	250	72%
Positive school atmosphere	15	25	26	88	96	250	74%

Sources: Research data 2025

✓ *Analysis:*

Over 70% of students agreed that emotional safety, respect, and a positive atmosphere foster their willingness to learn and engage. The emotional climate is a strong enabler of academic participation.

• *Research Question Three:*

To what extent does teachers instructional practices support students learning in Koidu Secondary School?

Table 3 The Extent Teachers' Instructional Practices Influence Student Learning.

Statement	SD	D	N	A	SA	Total Response	Percentage
Use of diverse teaching methods	12	21	30	91	96	250	75%
Lessons are engaging	28	20	10	94	98	250	77%
Teachers relate topics to real life	19	22	16	91	102	250	77%
Teaching methods aid understanding	20	23	20	88	99	250	75%

Sources: Research data 2025

✓ *Analysis:*

More than 75% of respondents agreed that teachers' instructional practices, including real-life examples and varied strategies, significantly contribute to improved student learning outcomes

➤ *Part Two (For Teachers)*• *(B) Research Question One:*

To what extent does the physical environment of Koidu Secondary School (KSS) promote students' learning?

Table 4 The Extent of the Physical Environment of the School Affects Students' Learning

Statement	SD	D	N	A	SA	Total Response	Percentage
The classroom is well-ventilated	2	2	1	5	10	20	75%
Furniture and space are adequate	1	3	1	7	11	20	90%
School is clean and maintained	2	1	1	7	9	20	80%
Classroom helps concentration	2	2	1	7	8	20	75%

Sources: Research data 2025

✓ *Analysis:*

The majority of teachers agreed or strongly agreed that good classroom cleanliness, ventilation, and space positively influence learning. Over 75% affirmed good physical conditions support concentration. Also 20% of the teachers strongly disagree or disagree of the opinion that classroom

cleanliness, ventilation, and space positively influence learning.

• *(B) Research Question Two:*

How the emotional climate does affects students' learning in Koidu Secondary School?

Table 5 How the Emotional Climate Affect Students' Learning

Statement	SD	D	N	A	SA	Total Response	Percentage
Students feel emotionally safe	1	1	-	9	9	20	90%
Respect from teachers/classmates	3	2	1	6	8	20	70%
Confidence to ask questions	2	2	1	8	7	20	75%
Positive school atmosphere	1	2	1	6	9	20	75%

Sources: Research data 2025

✓ *Analysis:*

Over 75% of teachers agreed that emotional safety, respect, and a positive atmosphere foster their willingness to learn and engage. The emotional climate is a strong enabler of academic participation.

• *(B) Research Question Three:*

To what extent does teachers' instructional practices support students' learning in Koidu Secondary School?

Table 6 The Extent Teachers' Instructional Practices Influence Student Learning

Statement	SD	D	N	A	SA	Total Response	Percentage
Use of diverse teaching methods	1	1	1	8	9	20	85%
Lessons are engaging	1	1	-	9	9	20	90%
Teachers relate topics to real life	1	1	-	8	8	20	80%
Teaching methods aid understanding	1	1	-	8	9	20	85%

Sources: Research data 2025

✓ *Analysis:*

More than 85% of respondents agreed that teachers' instructional practices, including real-life examples and varied strategies, significantly contribute to improved student learning outcomes.

*B. Summary of Findings*

From the analysis of the results obtained from the answered questionnaire, it was discovered that:

- The Physical and emotional environments significantly influence student learning. This was measured using the Likert scale questionnaire on the effect of the learning environment.
- The field data substantial aligned that the physical environment of the school have a strong effect on students learning. According to the table; 4.2, it shows that 70% (189 out of 250) of the students in Koidu Secondary School (KSS) were of the opinion that physical environment goes a long way to determine the success of the students learning. Also in table 4.2(B) majority of the teachers strongly agreed that physical environment supports students learning. The table shows that 75% of the teachers attested to it.

**V. DISCUSSION OF FINDINGS**➤ *Physical Environment and Learning*

The research carried out shows that the physical conditions of the school, that is classroom ventilation, seating, lighting, and cleanliness play a crucial role in students' ability to concentrate and participate. Fraser (2012), who agrees that a comfortable, safe, and well-equipped physical environment improves student learning outcomes.

➤ *Emotional Climate*

Studies have proved that emotional support, mutual respect, and student-teacher relationships significantly affect learning. This supports the work of Pianta & Hamre (2019), who emphasized that favorable school climate enhances engagement and academic performance.

➤ *Teachers Instructional Practices*

Students responded positively to teachers' use of varied and engaging methods, with real-life applications. This agrees with Vygotsky L. S. (1978) theory that learning is most productive in socially and contextually helpful environments.

➤ *Recommendations*

The Physical Infrastructure should be improved by renovating and expanding classrooms to reduce

overcrowding and provide better ventilation, seating, and lighting systems.

In addition, teachers' capacity should be enhanced through offering regular training in modern instructional methods and classroom management, encouraging mentorship and peer collaboration among teachers.

➤ *Suggestions for Further Study*

The following are the suggestions for further studies. They include:

- Exploring the impact of parental involvement in learning environments.
- Investigating gender-based differences in learning experiences.

**VI. CONCLUSION**

The research concludes that an effective learning environment—comprising a conducive physical setting, supportive emotional climate, adaptive instructional methods, relevant technology, and cultural inclusivity—plays a crucial role in promoting student education in Koidu Secondary School.

Notwithstanding, some of the infrastructural and resource constraint, the commitment of teachers and an encouraging emotional atmosphere are strengths to build on. In dealing with the challenges like overcrowding and lack of materials is necessary for a long-term development.

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