

# Learners Progressive Insight and Scholastic Triumphs Enhanced by School Facilities

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Accepted: 25 October 2024

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<https://doi.org/10.70788/ern.1.1.2024.7>

**Abstract:** The availability of basic facilities in institutes impact academic performance of students in all domains. Governments and societies around the globe strive to improve their educational systems so youth may avail the opportunity of reaching institutes to acquire the knowledge and skills, leading a healthy and constructive vivacity. Key inputs to the education system, such as curricula, trained teachers, sufficient institutional facilities and infrastructure, help to improve the quality of education. Present study emphasizes the impact measurement and evaluation of primary facilities in schools and their role in enhancing student educational growth and learning. The accessible population was selected based on research interest, centered on the non-probability convenience sampling. A total of eighteen key facilities were targeted and response analysis of participants was evaluated based on the hypothesis regarding impact of school facilities on student progress. Findings of present study conclude that educational achievements are negatively impacted by inadequate level of physical facilities and nonconductive learning atmosphere. Results highlighted critical interpretations where sufficient school infrastructure and strong child-parent interaction enhance progressive insight among students. These findings are evident as continuous improvement of school facilities build a foundation of institutional priming, optimizing learners overall growth and scholastic triumphs.

**Keywords:** Institutes Infrastructure, Convenience Sampling, Scholastic Triumphs

## Introduction

School facilities contribute significantly ensuring quality education and act as an imperative criterion for measuring child's progressive growth (Yangambi, 2023). Institutes prerequisite infrastructure followed by electricity, ventilated rooms, laboratories, colors complexity, learning spaces, sports, recreational activities, libraries, transport and so on impact students learning processes (Teixeira, Amoroso, & Gresham, 2017). According to Clemmons (2014) schools need to make careful assessments to determine when aging facilities need major renovation or replacement. An older facility that has been well-updated and maintained, can still meet the needs of students. The quality of school's facilities is a key determinant of its educational

excellence. Education is one of the important tools in this modernized world and every country tries its best to improve the literacy ratios of their citizens (Nabi et al., 2019). School substructures serve as one of the benchmarks for assessing the degree of educational progress and growth. Inadequate management and maintenance of the school system's infrastructure can negatively affect students' academic performance (Ikegbusi et al., 2021). It is pertinent to mention that inadequate facilities surely affect students smooth teaching-learning process. No doubt the academic performance of each student depends primarily on the facilities they are exposed to while learning, whereas lacking, raise great issues and concerns (Pierre and Cyprien, 2024). Inadequate or lack of basic school facilities may limit educational programs, whereas adequate infrastructure enhances learning process and develop skill-based expertise in schools' development (Olugbenga, 2019).

Moreover, schools with good facilities and educational resources produced many students accepted into higher institutions. None may overstate the value and applications of any basic school facility as each infrastructure facility is predominantly important (Ullah & Usman, 2023). Most importantly, educationalists express confidence in classroom technology for excellent learning outcomes and use applications in the context of teaching activities (Bayne, 2015). The spectacle of learning is a behavioral change in people because of a new experience. Nobody could oppose that learning is a permanent change in child behavior as an internal process of thinking and emotions; it is noticeable and contextual, but also factually interconnected to the situation in which knowledge takes place and is used (Jdaitawi, 2020; Burns, 1995).

Many researchers over the past century have consistently found that school facilities impact teaching and learning in profound ways, yet state and local policymakers often overlook the impact facilities can play in improving outcomes for both teachers and students. Conducive and supportive learning environments result in emerging talents and their role in all life spheres. The main objective of the current study was to assess the impact of school facilities viz; teaching-learning, health, sports & recreational facilities on the students' performances in learning and achievements in their life domains.

### **Role of School Infrastructure in Meeting Current Challenges**

The prominence of school infrastructure for students relies on a contented, confident, secure, engrossed and sound learning environment by offering all necessary amenities and facilities as parents consider the institute physical facilities, one of the primary factors, when choosing a learning place. School infrastructure holds pronounced impact on student achievements and academic excellence (Teixeira et al., 2017). A large school facility is more than a building kept in the best possible condition through routine maintenance, instead school facilities need to construct an ideal environment for scholastic victory centered on diverse research discoveries signifying a direct influence on learners (Yangambi, 2023). Institutional facilities ensure quality education as an important tool for measuring growth and expansion of education, as particularly, physiological facilities, security needs, recreational facilities, sports and demonstration facility, etc. (Figure 1).



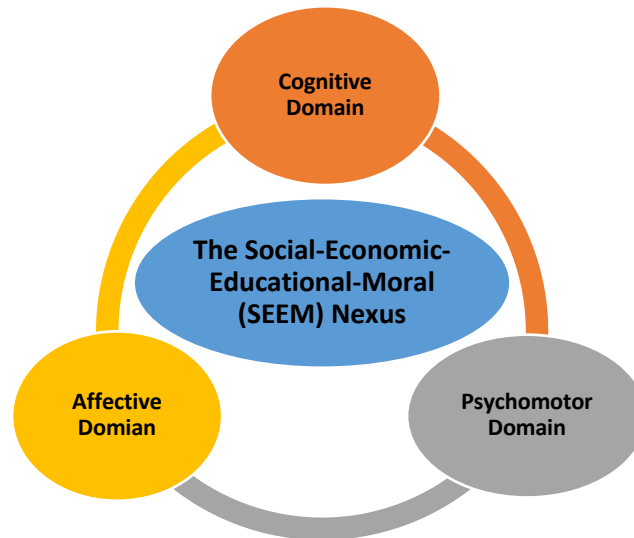
**Figure 1:** Interconnected School Facilities in Challenging Era towards Students Overall Wellbeing

### School Facilities Enhancing Students Cognitive, Affective & Psychomotor Domains

Fundamental obstacles affecting institutes is student involvement in diverse antisocial vices, thus rendering schools ineffective in the emotional field. There must be career counselling in institutes regarding appropriate brainstorming of child. The disruptive societal flaws manifest learners in the form of school absenteeism, tardiness at school, and insubordination to the school authority, among others. Nowadays, students seem lazy, dishonest, and always looking for shortcuts to success. Here the affective, psychomotor and cognitive domains of a child are compromised.

School infrastructure, trained teachers, conducive learning environment at home and schools, positive peer-company, are all major factors responsible in positive up-bringing of a child. Further, various basic co-curricular activities in schools help students stay active and interested toward learning. Routine conduct of games, sports, demonstrations, lab work, social interaction with peers, help students learn in more conducive and friendly way. The conducive learning environment at institutes and homes, enhance students mental, emotional and psychomotor domains, thus laying a strong foundation towards future challenges (Figure 2). Bloom's Taxonomy is a logically sequenced structure depicting the cognitive skills required for students to grasp knowledge analytically and meaningfully. (Nurmatova and Altun, 2023; Huo et al., 2018; Chandio et al., 2017).

A well-built school infrastructure contributes to a sound learning environment, enhances the overall quality of schools, impacts the educational experience and delivers better educational outcomes. The importance of school infrastructure helps build a homely environment for students and constructing them a strong individual focusing, physical growth, student holistic development, mental and emotional capabilities, fostering well-being, enables focused learning, improves academic performance, safety and security and multi-purpose benefits in meeting emerging challenges of coming decade.



**Figure 2:** Impact of School Facilities on Learners SEEM Nexus

### Facilities in Private vs Public Institutes

The rapidly increasing figure of private educational institutions is debatable topic for mentor and social scientists. As compared to previous decades the no. of private schools is much increased, and they are providing students with the excellent instructive atmosphere (Awan & Saeed, 2014). Consider that of the 48.7 million school going children in Pakistan, 43% attend private schools. Of the 391,427 schools in the country, 40% are private (ASER, 2023). The claims of private schools with respect to availability of the facilities therein and the provision of quality education than public is the intensive point of interest. Public schools in Pakistan are still far behind in provision of basic learning facilities and are even unsuccessful in managing sitting space to children admitted.

This lack of uniformity in Pakistani schools has accelerated the pace of polarization in the society. First and foremost, the curriculum must be uniform in all educational sectors regardless of public/private debate and the entire school education in Pakistan must be based on uniform principles (Ahmed et al., 2014). A sound education system is crucial for every nation around the globe. Every nation develops its generation based on vigorous training and learning according to social, political, economic and ideological grounds.

Various factors are key responsible in disturbing this uniformity viz: improper planning and policymaking, weak governance, poor administration and lack of policy-implementation, sheer lack of political will on the part of successive regimes to implement policies vigorously and ignoring teachers as unimportant element, who indubitably are the backbone of education system. To maintain a uniformity in public and private schools in Pakistan a viable education system must be introduced nationwide.

### Material and Methodology

The present descriptive study focuses on quantitative data analysis collected from a questionnaire (18 key features) and interviews followed by direct observations. Interviews and questionnaires

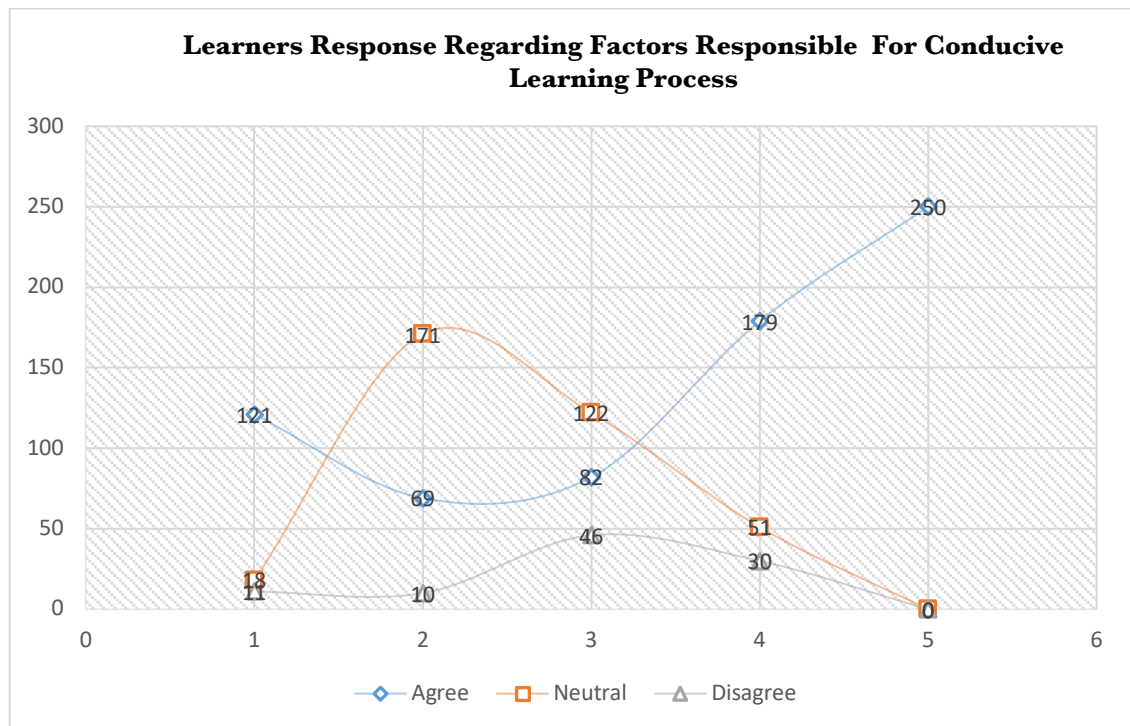
were adopted each with two options for administration: remote/direct. There were 20 teachers and 150 students in government educational zone, while in private educational zone 15 teachers and 100 students were targeted. The population of the study comprised of selected audience (285) in the government and private secondary schools and data was analyzed based on the hypothesis formulated. Simple random sampling method was adopted, and face and content validity were employed in this study. To administer the validated instrument of the study, an introductory letter was collected from the head of department and presented to schools that were randomly selected. Hypothesis of this study emphasizes impact of school infrastructure on students learning and achievements followed by descriptive statistical analysis, mean and standard deviation, to address research questions.

## Results

The findings of our study analysis revealed that school infrastructure and facilities hold significant impact on students learning and growth in all life domains. A total of 121 students strongly agreed that sports facility, science laboratories, internet and counselling sessions, play significant role in attaining academic excellence with confidence and stability, followed by 69 students who claimed that basic facilities viz: clean drinking water, electricity, proper sitting-space and ventilated rooms are enough for learning in schools, whereas, 82 students insisted that AV-aids are important in teaching-learning process, and 179 respondents strongly claimed that teachers behavior and training is major factor in conducive learning progression, respectively (Figure 3).

Among 35 selected instructors 31 claimed importance of technology, laboratories, internet in progressive learning of child in today's era, while 29 participants agreed that basic school facilities impact students' health with a positive effect on their academic performance and several demonstration resources hold a dynamic and progressive effect on child's academic routine as schools' amenities hugely impact student growth. Further 10 teachers insisted that the physical facilities motivate the beginners and upsurge their enactment, and our study observations also support their argument as it was monitored that students taught in highly equipped and facilitated outperformed as compared to those students who learned in a non-conducive environment with unavailability of basic necessary facilities and infrastructure enhancing social, economic, educational and moral nexus among learners. Moreover, 08 instructors claimed that conducive learning environment promote sense of activeness among student as the key "how the learning process can work ideally". Supporting aspects for active students during the learning process cannot be separated from environmental factors, which in this case were schools as providers of educational institutions. (Figure 4).

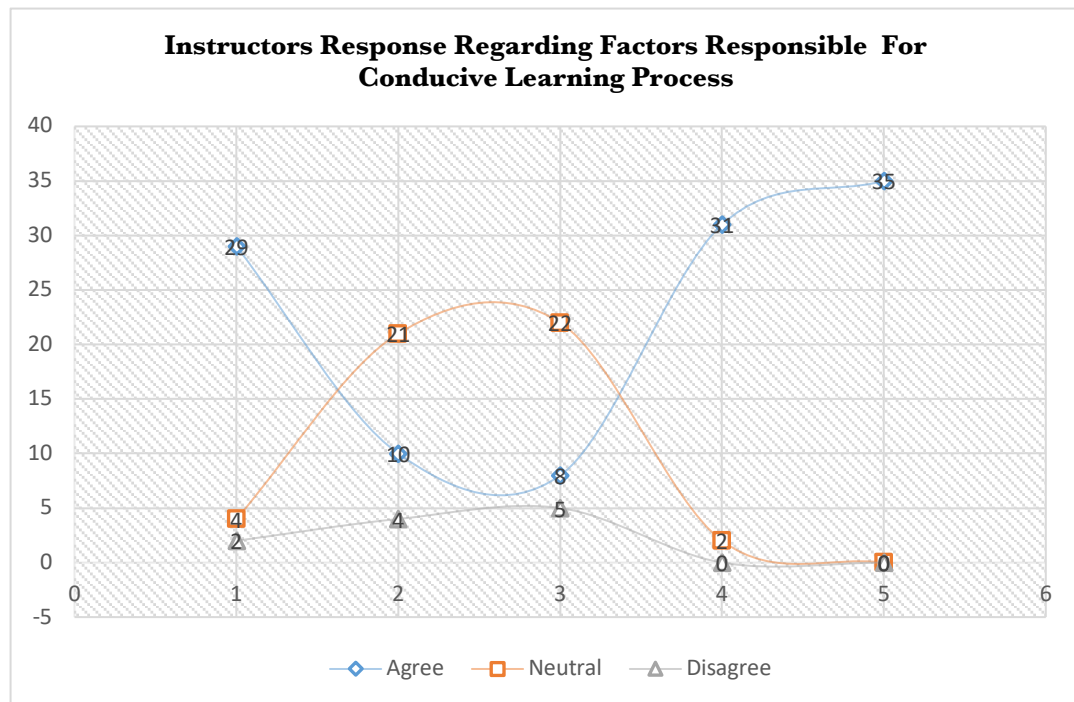
Additionally, study findings focus great impact of school facilities on student academic progress and achievements as the overall mean of disagreement was low ( $\mu = 2.140$ ) and the overall standard deviation recorded was (1.7391). These findings imply a relatively positive influence of school facilities and infrastructure on learners' growth and achievements (Table 1). Beside school facilities and infrastructure availability, conducive home environment plays significant role in students positive grooming and development, where all participants strongly agreed that child-parent interaction is very important for mental peace and to learn more effectively (Figure 3 and 4). Hence, it is declared that institutional facilities hold paramount impact on learners overall progress and achievements.



**Figure 3:** Response analysis of study participants (learners) attaining academic excellence

**Table 1:** Descriptive Statistical Analysis Based on Basic Facilities Availability in Schools & Homes

Facilities	Sample Size	M	M	Mean	S. D
Electricity	285	4	8	3.51	1.766
Clean drinking water	285	4	8	3.02	1.112
Proper sitting space	285	4	8	3.55	1.572
Child-parent interaction at homes	285	4	8	1.54	1.229
Sports facility promoting mental and physical well-being	285	4	8	1.50	1.861
Physical trainer	285	4	8	2.31	1.227
Computer labs	285	4	8	1.56	1.738
Students counselling programs	285	4	8	1.01	1.339
Internet	285	4	8	2.87	1.201
Multimedia, projectors, AV-aids	285	4	8	1.60	1.323
Importance of science labs	285	4	8	2.32	0.000
Health or first aid facility	285	4	8	1.44	1.510
Enough books of each course in Libraries	285	4	8	1.43	1.081
Debates	285	4	8	3.21	1.376
Ventilated rooms	285	4	8	1.76	1.555
Adequate toilets equipped with necessities	285	4	8	2.65	1.299
Photocopies and printers'	285	4	8	2.00	1.980
Recreational facilities	285	4	8	1.45	1.331
<b>Total</b>	285	4	8	<b>2.140</b>	<b>1.7391</b>



**Figure 4:** Response analysis of study participants (instructors) attaining academic excellence

### Discussion

School infrastructure hugely influence learner's growth and achievements as these physical facilities promote the quality of teaching and learning, promoting quality fundamental education. The physical facilities of the school remained the most vibrant factor in students' achievement. Facilities like laboratories, libraries, school buildings, and AV-aids are very essential for higher academic achievement (Alimi, 2014). Present study emphasizes impact of availability of basic facilities in institutes on students' academic growth and mental well-being. It is pertinent to mention that majority public sector institutes in Pakistan have very limited infrastructure and totally lack basic facilities for children in their premises. This is obviously a fundamental dilemma and pass out students from these institutes lack confidence in their personalities. In another study by Hale (2002), the relationship between educational resources and students' academic performance in Kenya was investigated, which revealed a very strong positive and significant relationship between instructional resources and academic performance. Moreover, external environment affects learning and conducive physical environment holds multi-benefits enhancing adolescence growth and achievements. Similar studies were reported by Shwind (2014), where it was debated that an environment that is too hot or too cold can be hard to concentrate when you are uncomfortable as external temperature affects students' engagement levels and overall productivity, regardless of age where both the teacher and student achievement are affected. Dare (2010); Ramli & Zain, (2019) described school infrastructure as key assets fostering effective teaching and learning to protect the physical well-being of the learners.

Several diverse perspectives of social scientists argue that the condition, size and shape of classrooms and school building having greater effects on students learning (O'Neill and Oates, 2001; Earthman, 2002). Similarly, Lawrence (2005) debated that building condition and stability has no relationship with the academic scores of the students. In response to previous researchers, Woolner,



et al. (2007) conducted a study and found different factors of the physical environment that have both positive and negative effects on one another as well as on the academic performance of students. Along with all available facilities, the most important role is performed by the teachers and parents in imparting students with skills. Private school instructors are well qualified and guide students bitterly (Andrabi et al., 2002). Whereas Imran (2010) rejected this statement and argued that teachers in private schools are not well-qualified then public ones, but their attitude, interaction and behavior is far better as compared to public school teachers (Ahsan et al., 2012).

Our study emphasizes that beside school facilities, child-parent relationship also plays an important role in positive upbringing and personality development of students. Although, if schools lack various facilities, still parents at home may create strong bond with their child as they play key role in promoting ethics in their child. No doubt school primary facilities help student growing positively and learning progressively, but at the same time parents need to fill this gap by providing conducive and supportive environment at home to avoid spoilage of their child. Study of Barnett et al. (2012) supports our analysis as parent's education and their assistance with children not only creates nous but also strengthens their children's communication. It is hereby endorsed that beside fundamental school facilities, teachers and parents' behavior augment quality teaching and learning enhancing students' morals.

### **Conclusion**

Based on the study findings, it is concluded that most of the schools lack sufficient teaching facilities, but the available ones have great impact on the students' academic performance. School management must keep in notice that basic infrastructure is way forward towards never-ending progress of future shining stars. Successful teaching and learning stem from several factors that require radical changes to achieve satisfactory outcomes for the general population. Beside school facilities, attitude and behavior of parents with their children impact greatly towards personality building and intellectual upbringing. Research outcomes insist continuous improvement of school infrastructure to boost student achievement in diverse knowledge domains followed by availability of conducive environment at homes.

### **Recommendations**

The impact of learning environment on academic outcomes is rapidly growing across the globe. A sound education system is crucial for every nation based on vigorous training and learning according to social, political, economic and ideological grounds. The lack of uniformity in institutes accelerate the pace of polarization in the societies. No doubt a rigorous and conducive learning space is a discipline that combines diverse sciences. Hence, it is recommended to timely implement, the involvement of all four major societal pillars viz: government, parents, teachers and students, in the decision-making process of institutional infrastructure development.

**Conflict of Interest:** No potential conflict of interest is declared by any author.

**Author (s) Contribution:** Amber Jamshaid planned research outline, Amber Jamshaid, Hamna Zaheer, Aamna Mukhtar, Shafia Baber and Tayyaba Roohi: write original draft; Amber Jamshaid and Hamna Zaheer reviewing and editing of the manuscript. All the authors have read and agreed to the published version of the manuscript.



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