

## Leadership Practices Used by School Leaders to Foster 21<sup>st</sup> Century Skills Among Elementary School Students: A Phenomenological Study

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### Abstract

In today's 21st-century era, skills like critical thinking, communication, creativity, and collaboration are needed in modern society. These skills help students in their future education, and students can solve their real-life problems. This study explored the leadership practices used by school leaders in developing 21<sup>st</sup> century skills among elementary school students in private educational institutions of Sialkot. It was a qualitative study using a phenomenological research design. 9 participants were selected through the purposive sampling technique. Data were collected through semi-structured interviews. An interview guide was developed based on the objective of the study and relevant previous literature. Reflexive thematic analysis was used to analyze the data by Braun & Clarke following six steps. The main theme derived from the data was Leadership practices and strategies for fostering 21<sup>st</sup> century skills. There were four sub-themes: teacher professional development and capacity building, activity-based and student-centred instructional leadership, and creating safe and supportive environments for intellectual risk-taking. The results of the study indicate that the teachers' professional development, student-centred and activity-based instructional strategies, student-centred instructional leadership and a supportive and safe environment by school leaders were used to promote 21<sup>st</sup> century skills. The heads of school still have an affirmative and positive attitude towards fostering these crucial skills among students. With proper resources and support, they can bring further desirable changes to the education system. Also, school leaders should be supported with professional learning and create a structured environment for the development of 21<sup>st</sup> century skills.

**Keywords:** Educational Leadership, 21st century Skills, Elementary School Students, School Leadership, Skill Development

### Introduction

The concept of educational leadership has evolved with the passage of time from "educational administration," to "educational management" and now referred as "educational leadership", acknowledging the evolution in concept from control, organization and administration to visions, inspirations, influences and collaborations which in turn has improved school systems greatly not

only by enhancing student's learning, but also by empowering and guiding teachers to achieve common goals (Bush, 2020).

The significance of effective educational leadership is directly connected to better educational quality. It also helps to achieve Sustainable Development Goal (SDG) 4, which promotes equitable and inclusive quality education to every individual (Rieckmann, 2017). Educational leaders who want to create a cooperative and trusted environment observe classrooms, provide guidance continuously, and communicate openly.

The purpose of educational leadership in the 21<sup>st</sup> century has become vital because of technological and social changes. Skills like collaboration, creativity, communication, and critical thinking are the requirements of the present world. These competencies should be developed by teachers with developing methods that promote social and long-lasting learning. Teachers are trying to foster educational activities that are interlinked with 21st century skills such as communication, collaboration, critical thinking, and creativity. These important skills enhance student understanding and help them to collaborate. With the help of 21st century skills, teachers can apply innovative techniques in the classroom, which enhance the teaching and learning process (Ahmad & Ghavifekr, 2017). Policy guidance should also be brought with applied action at the school level to support students and teachers in adjusting to change. This needs strategic thinking, flexibility, and vision to develop a continuous enhancement in the culture of schools (Talat & Chaudhry, 2014).

In the 21st century, students should be guided towards modernization and technology so that they do not face problems in the future. Therefore, it is necessary to develop 21st century skills among elementary school students. However, many schools depend on teacher-centred instruction and traditional teaching methods such as rote learning. Consequently, students often fail to develop those skills that are essential to solving real-world problems. Therefore, it is necessary to explore the role of educational leadership in fostering 21st century skills among elementary school students.

### **Objective of the Study**

1. To explore leadership practices used by elementary school leaders to foster 21<sup>st</sup> century skills among students.

### **Research Question**

1. How do elementary school leaders describe their practices for fostering 21st century skills among students?

### **Literature Review**

The process of influencing, motivating, and guiding individuals or teams to achieve common goals is known as leadership (Ahmed, 2024). Leadership is not only about providing direction and support, but it also involves influencing individuals to work enthusiastically together to achieve common goals through effective communication and decision-making skills. It creates a better learning environment for students' academic and personal growth.

Leadership plays an important role in inspiration and innovation and helps individuals to achieve common goals (Connolly et al. 2019). In an educational context, it has a vital place. According to Hallinger (2011), instructional priorities, school aims, and teacher practices are indirectly controlled by school leadership. This control is important at the elementary level because leadership choices influence the development of fundamental skills and early learning experiences. There are different skills in the 21st century, classified by Wrahatnolo and Munoto (2018), having different categories like innovative and learning skills, media and information, technological skills, and career skills. Critical thinking has been emphasized in the current literature (Jamil et al., 2024;

Naseer et al., 2022). These fields need institutions to move from subject-based learning to experience-based learning. Academic leaders play a crucial role in elevating a vision in which these skills are thoroughly integrated into subjects. Learners should think independently and try to apply digital abilities to resolve problems in the physical world and also collaborate with others (Kumar & Prajapati, 2025).

In this modern world, 21st century skills are important for students. The 4Cs and digital literacy are key component skills for modern learners (Weng et al., 2022). These 4Cs have been focused in latest literature through textbook analysis (Jamil et al., 2025). These skills are very important in this rapidly changing world. Teaching 21st century skills at the elementary level helps students to understand the lesson concept, students take an interest in learning, and are better prepared for future challenges (Chalkiadaki, 2018).

There are different studies at the national level. According to a study by Nasir et al. (2025), effective leadership motivates teachers to use activity-based and creative teaching methods, which help to improve critical thinking, collaboration, and communication skills. Another study aimed to examine the impact of instructional leadership on 21st century learning skills of students. Findings showed that supportive leadership increases students' problem-solving abilities, digital literacy, and participation (Akram et al., 2025). In the same way, another study by Hussain et al. (2025) examined the relationship between school leaders and innovative approaches to learning. The results show that supportive school leadership positively guides teachers, and students work better, with their creativity also being enhanced. The study suggests that involving school-involved teachers in decision-making promotes innovative learning and helps develop a curriculum aligned with the needs of 21st century skills.

In international literature, there are studies conducted, such as a study focused on how school leaders work in developing 21<sup>st</sup> century skills among students with a sample of school leaders and teachers from Finnish schools. The results of this study indicate that when leaders involve students and teachers in decision-making, it improves communication, creativity, and self-learning. This study suggests that the school leaders should keep working and improve their skills. Teachers should use new and creative ways of teaching in the classroom (Memela & Ramathan, 2022). In another study, researchers focused on examining how school leadership plays its role in the development of these skills. The study was conducted in the Singapore context with a sample of administrators and teachers. For students' collaborative learning and student engagement, this study proved that technology helps leadership in developing both skills among students. For technology integration, this study suggested enhancing supportive leadership and digital resources (Chua & Soo, 2023). In the same way, another study focused on how 21<sup>st</sup> century learning skills are influenced by transformational leadership from a Canadian perspective. This study suggested that strong leadership policies and student-centred learning are important for the modern era (Fullan, 2020).

### **Research Methodology**

It was a qualitative study using a phenomenological research design (Umanailo, 2019). Qualitative research is a non-quantitative method used to understand the ideas, concepts, and in-depth meanings (Hands, 2022). This design also helps researchers to understand participants' perspectives. A purposive sampling technique was used, which means choosing the participants who have detailed information and work experience about the topic (Patton, 2015; Tajik et al., 2025). This technique was used by the researchers because they wanted to collect meaningful and relevant data from those participants who were knowledgeable and suitable for the study. In total, 9 head teachers were interviewed, who are renowned and participate in developing 21st century skills in schools. The semi-structured interview method was used for data collection. An interview

guide was developed based on the literature and the objectives of the study. In this technique, the interviewer gathers data through written questions that are not strictly followed, and the data is gathered through one-to-one communication, which is called the semi-structured interview method (Longhurst & Johnston, 2023). Every interview took about 30-40 minutes and was audio-recorded with participants' permission for transcription and analysis. Reflexive thematic analysis was used for data analysis following the six steps of Braun & Clarke. In this method, the researcher actively reflects on their own role, choices, and beliefs, which is the reflexive part of the analysis (Braun & Clarke, 2022). All ethical considerations and trustworthiness were ensured in the study.

## **Findings and Results**

Findings of the study are presented based on the following themes and sub-themes.

### **Theme: Leadership Practices and Strategies for Fostering 21st century Skills**

This theme focuses on instructional strategies, different leadership practices, and school-based systems that help participants to encourage 21st century skills in their elementary schools and meet the needs of the modern world. All nine participants explained different leadership styles that focus not only on managing school tasks but also on active pedagogic leadership. Four sub-themes were extracted from the data: (1) teacher professional development and capacity building, (2) activity-based and student-centred instructional leadership, (3) fostering collaborative and innovative school cultures, and (4) creating safe and supportive environments for risk-taking. Further description of the sub-themes is presented as follows:

#### **Sub-Theme 1: Teacher Professional Development and Capacity Building**

The most consistently described and most deliberately prioritized leadership practice was investment in teacher professional development as the primary mechanism for institutionalizing 21st century skills. According to the participants, teachers need to learn modern teaching methods so that they can teach these skills to the students. Several participants also described their own ongoing professional learning, including international leadership conferences and AI skills training, as modelling the growth mindset they sought to develop in their staff. Participant 3 was of the view in the following words:

*Yes, we give teachers training and coaching, and give them training about what 21st century skills are, in which we train teachers how to do project-based learning and hands-on activities in the classroom, and how to develop critical thinking in students. This can happen by moving from a traditional teaching method, which is based on memorization, toward different 21st century strategies in the classroom, so that students understand the concept of why and how things happen rather than simply accepting information at face value.*

According to participant 6, it was described as follows:

*Teachers should have professional development training, be mentored, and be given instructional guidance. This is how we can perfect their teaching. Teacher training is very important because when teachers are fully trained and know about these skills, they can develop those skills in the students. In my school, after appointing any teacher, in their first month, we give them professional development training to improve their teaching and orient them to our school's 21st century approach.*

In the view of participant, it was explained in the following words:

*First, we conduct professional trainings for our teachers. We tell them what these skills are and how they can use them in their classes. We help teachers with whiteboards, digital tools, and other resources. We also teach them how to use digital tools to improve their teaching and learning. I also check their classroom practice regularly, and if I feel that the teacher is*

*making a mistake, I guide them directly. All these things together create a good environment where 21st century skills can genuinely flourish.*

### **Sub-Theme2: Activity-Based and Student-Centred Instructional Leadership**

A second major dimension of participants' leadership practice was their promotion of activity-based, student-centred instruction to develop 21st century skills. Participants described interactive, collaborative, and practically grounded approaches, including group projects, presentations, role-play, debates, problem-solving tasks, brainstorming, and hands-on experiments. The involvement of digital tools, interactive whiteboards, projectors, AI platforms, and online resources was frequently cited as a means of making student-centred learning both more accessible and more motivating. According to participant 9, it was described as follows:

*I asked the teachers to plan an activity in the school in which students present different projects, such as how electricity is produced or how the heart circulates blood, and are asked to choose their own topic according to their grade level. This helps them to collaborate, make things creative, and present projects by choosing their idea and topic critically. The freedom to choose their own topic is itself a 21st century skill, which develops student agency, decision-making, and intellectual ownership of their learning.*

Participant 4 narrated her perspective in the following words:

*As a head teacher, I mostly guide my teachers to encourage their students. If they encourage their students, it will be easier for them to ask questions freely to their teachers. Secondly, I encourage group activities. If there is activity in the group, the students will be able to perform well, because activities play a very important role in students' growth. We recently arranged an activity in our nursery class, in which we gave preference to thumb colouring, to spark creativity. We also prefer the students' own ideas in activities, which gives them the motivation to perform well.*

Participant 3 was of the view in the following words:

*We have used AI tools in our school laboratories. We used WPS for our computer students, and for presentations, we first create themes and present the work in an effective way so students can better understand the lesson. Now, students have such command of these tools that they can present easily and confidently. We also conduct different workshops where we guide our teachers on how they can promote different 21st century skills in the classroom, and for younger classes, we conduct activities that help in developing creativity and making learning enjoyable.*

### **Sub-Theme 3: Fostering Collaborative and Innovative School Cultures**

Participants described the cultivation of a collaborative, innovative school culture among both teachers and students as a central leadership responsibility and a necessary infrastructure for 21st century skills development. Several participants described the explicit modelling of collaborative and innovative dispositions in their own leadership behaviour as the most powerful signal they could send to their staff about institutional values. The following was the narration of participant 1:

*Collaboration and innovation are encouraged through teamwork. If I give training to those staff members to work together, the higher authorities tell the teachers that they have to work in teams. We have placed them in groups in every class. Their skills will develop through this. If one person does the work, it will be credited to the team. If everyone does it, it will be credited to the team. For innovation, at the primary level, hands-on activities are the best*

*because the children bring projects themselves, make them, and bring them, and we train the teachers to give them these hands-on activities regularly.*

Participant 7 was of the view in the following words:

*I asked the teacher to share their ideas and work together. For example, in a weekend meeting, teachers share classroom challenges, teaching strategies, and new instructional ideas with each other. I also encourage teachers to use innovative teaching methods, such as student-centred activities and technology-based learning, and to share their innovative and professional ideas. This helps them to collaborate, and it improves overall teaching and learning practices across the school in a sustainable and self-reinforcing way.*

In the view of participant 9, it is stated as follows:

*We plan different meetings for teachers to share their class experience and discuss the challenges they face, and this helps them to use innovative ideas in the class. For collaboration, we arrange annual dinners and workshops for their enjoyment and relaxation, because you cannot build a collaborative culture by mandate alone; you have to build genuine human relationships first. When teachers genuinely trust and respect each other, the professional collaboration that follows is authentic and far more productive.*

#### **Sub-Theme 4: Creating Safe and Supportive Environments for Intellectual Risk-Taking**

Many of the participants talked about different leadership styles that help in creating a safe and supportive environment where students and teachers feel safe and free to share new ideas. They tried to be friendly and supportive with both students and teachers so that they feel comfortable and can talk with us easily. In the view of participant 4, it is stated as follows:

*In our school, we believe that teachers must be supportive because if teachers are not supportive, it will not help students to use new ideas, and they cannot make their own point. I believe that every student must have their own point of view because it is helpful in their further learning. In our school, we encourage students to share their innovative and new ideas with us, and we must try to implement these innovative ideas in our school. This helps in building confidence in students, which is helpful for their learning. Through this kind of healthy and supportive environment, students feel safe and confident, which helps us how to promote 21<sup>st</sup>- century skills in our school.*

According to participant 2, it was described as follows:

*In our school I can try to create an environment where students feel safe in sharing their ideas and can learn from their mistakes. If there is something wrong I always guide the teacher other than blaming them. In our school we give respect both teachers and students so they can freely use the innovative ideas which is helpful in the growth of both teachers and students because school is a place where everyone come to learn so we give them a chance to learn from their mistakes and it can help students to become more creative and innovative.*

Participant 9 narrated her perspective in the following words:

*The first thing I believe is we must encourage teachers and students in our school. I always try best that I can encourage both of them because if I encourage them they can freely communicate with me and it can help me to create a positive bond with students and the second thing that I believe important is freedom. I believe that very human as right to freely express their opinion and emotions. So, I always give freedom to my students that they can easily express their opinion no one can degrade them. I always respect their opinions. So, I think these things are important in developing different skills like creativity, critical thinking, and promoting innovative ideas.*

## Discussion

The results show that the school leaders in private elementary schools of Sialkot have already implemented many of the practices of the 21st century school leaders in the systematic development of teacher professional development, student-centered and activity-based approaches to teaching and learning, collaborative professional cultures, and psychologically safe learning environments. The focus on continuous, work-integrated professional development for educators and school leaders is reflective of research that identifies the quality of classroom instruction as the most fundamental in-school factor that drives student achievement, and that sustained teacher professional learning is key to enhancing teaching and learning (Darling-Hammond et al., 2017; Ahmed, 2024). The experiences of the participants in changing from the traditional teacher-centered, rote learning approach to project-based learning, hands-on activities, collaborative learning, and technology-based teaching resonate with the research finding that connects these approaches with deeper learning, creativity, collaboration, and real-life problem-solving (Toomela, 2016; Ahmad & Ghavifekr, 2017; Boss & Krauss, 2018; Chalkiadaki, 2018; Weng et al., 2022). Deliberate development of collaborative cultures throughout staff, where teachers share ideas, co-plan and reflect together, illustrates professional capital and that collective professionalism works better for improving teaching quality than individual effort (Admiraal et al., 2021; Giroux, 2018; Nasir et al., 2025; Hussain et al., 2025). Similarly, the leadership commitment to creating safe, respectful, and non-punitive spaces for teachers and students aligns with the literature on psychological safety that states the creation of supportive, non-hierarchical communication and willingness to take risks is key to learning and innovation (Patil et al., 2023). In Pakistan, where the culture of schools is hierarchical and exams are an integral part of the educational process, therefore, questioning and experimentation are not encouraged and these practices are important in the country and they are also found to be important worldwide as effective leadership in schools, apart from teaching, is a significant force for learning and school improvement (Leithwood et al., 2020; Bush, 2020; Akram et al., 2025; Memela & Ramrathan, 2022; Chua & Soo, 2023; Fullan, 2020).

## Conclusion

The study finds that effective school leaders have a vital role to play in developing 21st century skills for elementary students by focusing on teacher growth, on instilling student-centred and activity-based teaching methods, and on purposefully cultivating positive school climates built on collaboration and a feeling of safety. The leadership in sampled private schools has, in general, a positive and proactive attitude to 21st century learning, which includes dedicated staff training and building support for implementing ICT and guiding the schools towards more participatory and inquiry-based classrooms. Yet, these practices could benefit from additional strengthening in the form of robust systems, resources, and policy alignment in order to be replicated and scaled to different contexts in schools.

## Recommendations

Based on the findings of the study, the following are the recommendations.

1. Professional development workshops for school leaders and teachers should be organized with a strong focus on the development and implementation of 21st century skills in the regular school classroom.
2. School collaborative professional learning communities should be established to regularly share strategies for developing the 4Cs and digital literacy within the schools.
3. Digital tools and applications for learning/teaching should be provided to ensure access to digital tools.

4. Non-negotiables should be established for promoting psychological safety in explicit school-level policies and practices, and ensure that teachers and students engage in intellectual risk-taking.
5. Follow up and align curriculum, assessment, and monitoring systems with 21st century competencies throughout the school.

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