

## **Engaging Street-Connected Children in Learning 21<sup>st</sup> Century Skills through Non-Formal Education**

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### **Abstract**

Pakistan is a country with insufficient educational resources. The formal educational system is unable to cater to the educational needs of the growing population. A great number of school-going children were out-of-school or dropped out and the majority was those who could not attend formal schooling due to some issues. Non-Formal Education (NFE) is an alternative approach to cater to the needs of education. But only enrolling out-of-school children in schools is not enough for them. They also need to be equipped with the skills necessary to survive in the modern world. Pehli Kiran Schools initiative claims to engage street-connected children in learning 21st-century skills. The study aimed to explore the relevance of curriculum, provision of quality education, and the role of administration and teachers in keeping street-connected children motivated in the classrooms. It was qualitative research followed by a case study design. The research includes eight schools (all) involving their principals as a participant and their curriculum document employed at Pehli Kiran Schools. Framework for content analysis and semi-structured interviews were used for data collection. Thematic analysis and content analysis of different components of the curriculum of class five helped to draw conclusion. It was found these NFE schools had fewer physical and human resources. It was very difficult to create a conducive environment for learning in harsh weather conditions. But despite a lot of challenges, they were trying their level best to deliver a high-quality education within a limited budget and resources. For the development of 21st-century skills, the curriculum was found relevant. It was recommended that furniture should be available for students. Math clubs, spelling bees, and inter-school competitions should be introduced to develop teamwork, collaboration, and critical thinking among street-connected children.

**Keywords:** Non-formal education, physical resources, street-connected children, twenty-first-century skills

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## Introduction

Education facilitates a country's progress and prosperity. Every child has the right to get an education in Pakistan under Article 25-A, Constitution of Pakistan, 1973. Despite of this, Pakistan has the second-highest number of out-of-school children (OOSC) in the world, accounting for 44 percent of the entire population, estimated 22.8 million children aged 5 to 16, not attending school (Economic Survey of Pakistan, 2019-20). The number of out-of-school children and those who dropped out before completing primary school or after it is alarming in the previous few years (Ghani, 2018). Pakistan is a country with insufficient educational resources like infrastructure. The formal educational system is unable to cater to the educational needs of a growing population. Non-Formal Education (NFE) is an alternative approach to formal education. Shahid, Qureshi, and Saleem (2021) stated that programs to teach out-of-school children literacy, as well as information, skills, and values, are called non-formal education. NFE is required due to lack of financial resources, rapid growth in population and to make improvements in human development. Different organizations (governmental and non-governmental) are working for the enrollment of out-of-school children. Unfortunately, most non-formal schools/initiatives focus merely on enrolling out-of-school children, which results in future dropouts (Mughal & Aldridge, 2017). Enrollment of OOSC in schools is not enough; they must also be capable of living and surviving in today's world, which is very demanding and skill-oriented.

To address this critical issue, various organizations and initiatives have emerged to provide education and support to underprivileged children. One of these initiatives is Pehli Kiran Schools (PKS) which provides free non-formal education to street-connected children in Pakistan. These schools pledge to offer high-quality basic education to more than 3,000 students. They claim to be able to get street-connected children off the streets and into schools where these children can study, grow, and play. It is an initiative of the Jamshed Akhtar Qureshi (JAQ) Education Trust. It was established in 1995 under Pakistan's Trust Act 2 of 1882. Since the start, they have been ensuring the right to education for marginalized children. These schools claim to provide high-quality education, skills, and opportunities to these children. Moreover, they also claim that they emphasize their *tarbeeyat* with *taleem* to offer a whole-child approach. They engage their students in the learning of contemporary skills. They bring the school to the communities to promote student retention and success. The key educational goal of Pehli Kiran Schools is to promote literacy and 21st-century skills among street-connected children of underserved areas (Katchi Abadis) of Islamabad.

The large number in OOSC includes street-connected children. Street-connected children are defined as children who live and/or work on the streets and are often subject to abuse, exploitation, and violence (Dabir, 2014). According to National Commission on the Rights of Children (NCRC) statistics for the year, Pakistan is ranked 149th out of 185 nations in the Kids Rights Index 2022. More than 3.3 million children are connected to the streets in Pakistan (Nisar, 2023). Access to education for these children is limited due to various factors including poverty, parental death, parental neglect, discrimination, and lack of infrastructure in the country (Rueckert, 2019). Street-connected children are the most marginalized and vulnerable group, facing numerous barriers to accessing education and basic amenities (Embleton, Shah, Gayapersad, Kiptui, Ayuku & Braitstein, 2020). According to the Save the Children Annual Report (2020), street-connected children lack the necessary skills to live and survive in this era of science and technology which is very demanding and challenging in nature.

Today, one of the emphases of today's challenges in education is the promotion of contemporary skills among students. However, it is also a reality that a great number of the entire world population consists of dropouts, out-of-school children, and individuals who cannot attend formal schooling due to some issues. As a result, it can be quite difficult to help all students acquire 21st-century skills they need to succeed today. Alternatives were presented and implemented by countries around the world including Pakistan to cope with these challenges given by the changing world and to help such individuals attain education through non-formal education. With this, schools must place equal emphasis on teaching students the basics and ensuring that they acquire the skills they need to succeed in the twenty-first century (Segar, 2021).

The 21st-century skills are defined as a broad set of skills, knowledge, work habits, and traits of personality considered critically important for success in today's world, in all academic subject areas and educational careers throughout a student's life and workplaces (Moyer, 2016). It includes critical thinking, problem-solving, communication, collaboration, and digital literacy. They are also considered essential for learning at a deeper level. These skills differ from typical academic content-based capabilities. They also go beyond technology literacy. The Queensland Curriculum and Assessment Authority (2015) defined 21st-century skills as high-priority abilities and traits that are the most significant for students and learners to live and work well in the modern day. The Three Rs. of the past: Reading, writing, and arithmetic are now no longer sufficient in education (Vivekanandan, 2019). 21st-century skills are required to solve complex problems, collaborate and communicate well with others, and think critically (Stehle & Peters-Burton, 2019). The importance of student engagement in 21st-century skills is at the forefront of educational reforms because it can help to make them better citizens and deal with their problems more effectively.

Miller (2015) fostered character development in children in a technologically advanced civilization. Thompson (2012) asserted that literary characters, like real people, have a substantial effect on the reader. He enlisted six pillars of character: trustworthiness, respect, responsibility, fairness, caring, and citizenship. Pattaro (2016) also guided that it is essential to use a variety of literary genres to assist students in developing their personalities. Incorporating classic and folk literature, tales, and moral stories are suggested for character education. Fathurahman (2012) thinks that teachers can help students develop personalities through activities including discussion, debate, research, role-playing, and essay writing. Berkowitz, Bier, & McCauley (2017) argue that character development can be taken outside of the classroom to be most effective. Students can be engaged in community service by using their knowledge and virtues. They believe that parents should also be involved in the development of their children's characters.

Fullan (2015) emphasized citizenship education. It's important for a person to be conscious of his surroundings, especially their culture and community. Many subjects, including history, philosophy, and politics are inextricably linked with citizenship. Torres (2017) supports the above discussion by saying young children who will be future citizens must be given the necessary information to carry on the citizenry. Teaching citizenship involves giving students a set of skills that will allow them to participate effectively, successfully, and responsibly as adults in their future lives. Weinberg and Flinders (2018) claimed that citizenship is already fully integrated into all curriculum subjects. Power, freedom, equality, democracy, and racism, all of which are directly linked to citizenship can be explored clearly in all courses, particularly social studies, and history. Sánchez and Miguel (2020) found that ignoring and dismissing citizenship can lead to a decline in societal ideals.

Collaboration combines the personalities, abilities, and knowledge of several people to get the greatest possible result. People with a range of interests, talents, and skills can work together to create a product that is more valuable than the combination of their individual outputs. Dukewich (2019) suggests that working on an assignment with more than one participant is not inherently enlightening, but the team members' interaction stimulates learning. Harding (2018) argues that it is informative to study early Vygotsky and Piaget's research on the emergence of cooperative skills in young children. Gunawardena, Frechette, and Layne (2018) think that teachers can provide many opportunities to practice collaborative skills through everyday tasks. Holmes (2017) offers collaboration employing various methodologies, such as the Jigsaw technique, allowing groups to feel less anxious, developing group interactions, using real-life scenarios, considering demographics, and keeping in mind the diversity of groups.

The ability to deliver information or a message in a way that is both clear and intelligible is referred to as communication. Bambaeroo and Shokrpour (2017) think that teachers' communication skills are crucial for imparting knowledge to students. Scott (2015) asserts that communication is a skill that is required in all situations. Desires, requirements, feelings, and sentiments can all be expressed through communication. Communication skills are important in the classroom, at home, and in society. The more a student's ability to communicate, the more successful his public relations will be, resulting in more opportunities to develop and practice communication skills. Metusalem, Belenky, and DiCerbo (2017) explain that these activities can occur in several contexts and subject areas, take many different forms and serve a range of purposes.

An individual's capacity to build something new or transform something in a creative way using the knowledge they already have. In addition to art, it also refers to a wide range of practical solutions to a problem. Paek & and Sumners (2019) advocate creativity is a necessary skill that should be developed by the educational system beginning in early childhood. Wartono, Diantoro, and Batlolona (2018) combine six resources for creativity: academic skills, data, thinking techniques, character, inspiration, and setting. Ling and Loh (2020) described five aspects of creativity: Using the intellect, the vigorous and purposeful center of concentration and abilities, the use of concepts to create material results from concentrated objectives, passion, continuing dedication, being original, and, determining worth.

Critical thinking involves studying, analyzing, or synthesizing knowledge into a form that is useful. It makes it possible for people to comprehend and understand material in their everyday lives. Weaver, Samoshin, Lewis, and Gainer (2015) think that critical thinking is the key skill for the twenty-first century. This skill is developed through time and begins in childhood. Karakoc (2016) explains that utilizing the following tactics has a significant positive impact on the rise of higher-level thinking: Games, story mapping, problem-solving exercises, and quizzes. Saputri, Sajidan and Rinanto (2017) argue that inspiring inquisitiveness is beneficial to academic stability and passion. Critical thinking promotes an individual growth plan in which students from primary and secondary classes set their own learning goals based on their concerns. The 21st-century curriculum combines information, critical thinking, innovative skills, media literacy, and practical experience within the framework of fundamental academic courses (Acedo & Hughes, 2014).

The objectives of the research were to explore the:

1. provision of essential elements of 21st-century skills in the curriculum of Pehli Kiran's schools.
2. available physical resources for teaching 21st-century skills to street-connected children.
3. role of administration and teachers in providing quality education, a conducive environment, and motivating street-connected children in the classroom at Pehli Kiran Schools.

This study may be significant for making improvements in non-formal initiatives. It may help educationists in making practical plans for developing the modern skills of this century, mainly for children who are unable to attend formal institutions or who drop their studies due to different responsibilities and financial reasons. The study may help to revisit the existing practices for the effective education and sustainability of such programmes. It may also provide support for devising focused and target-oriented projects for such underprivileged children. This PKS provides tangible evidence to initiate and successfully run such non-formal setups to address this big challenge of street-connected children.

### **Method and Procedure**

The nature of the study was epistemologically related to the progressive paradigm. It believes that an individual's education must be based on individuality, progress, and change. Progressivists base their curricula on the needs, experiences, interests, and skills of their students because they believe that learning occurs best when something is relevant to the student's life. John Dewey was its proponent. This philosophy focuses on producing educated, active, and morally strong adults who can take part effectively in the work environment. The approach will be qualitative followed by inductive inquiry.

### **Research Design**

The design was a case study which enabled the researcher to answer the questions while taking into consideration how a phenomenon is influenced by the context within which it is situated (Baxter & Jack, 2008). Taking this design, the 'case' PKS was considered as a unique case orientation. We selected this non-formal school idea as a whole and in-depth exploration of all aspects that we would like to seek out. To deal with the research, a single case study (holistic) design was employed to address the research questions for exploring the role of PKS in engaging street-connected children in 21st-century skills. The true strength of the case study as a methodological approach

inherently lies in its ability to “enable the researcher to realize a holistic view of a certain phenomenon or series of events providing a round picture since many sources of evidence were used” (Hill, 2017). The rationale for one case study is that the study is representative of a typical case of a PKS (Yin, 2003).

### **Context of the Study**

Islamabad, Pakistan's capital has huge slums spread around the city in twenty-six union councils. The authorities rarely treat and address these underdeveloped areas as integral or equal components of cities (UN-Habitat, 2010). According to the National Census 2017, Islamabad has a population of one million people, of whom 38 percent or 379,620 live in slums or underdeveloped regions. Many of the slum dwellers are temporary migrants from other parts of the country (approximately 3%). In the last two decades, the number of people living in slums has grown. Previously, twenty years ago, there were only twelve slums in the city, but now there are more than forty-two (Qureshi, 2018). The residents are mostly illiterate with the large size of their families. Most children are out of school, and they wander here and there in the streets and fall into bad practices. Getting education is their least priority and at the same time, the government is also giving little attention to their education. The schools, facilities, and development are lacking in these areas. Some NGOs are running different schools with the coordination of government.

The Pehli Kiran Schools are one of them. These were mobile setups established in 1995 by a philanthropist in the slum areas of Islamabad. There were nine schools in total at the start but currently, eight schools are working. These all were running in the shed-like building structure. The PK schools had some admission requirements i.e., children must be between the ages of 3 and 14 and a photocopy of the parents' Computerized National Identity Card as well as an entry test (only for the placement of the students). Transport was not available for students. A team consisting of the best teachers builds the future of the children who are getting an education in these schools. They impart know society dents so that they can meet their daily life needs and play a positive role in society. The Pehli Kiran Schools had an average of eight teachers per school. They also include volunteers and alumni. The student-teacher ratio was 28:1. The average number of students in a school at primary level was around 350.

### Participants of the Study

The research was broader in nature and multifaceted data were gathered to address the scope of the study. The part of research used for this research article involved three types of information. The principals of all Pehli Kiran Schools were involved as participants in the study. The content taught at these schools was also a source of information to address the scope of the study. Moreover, the facilities available in the schools were also investigated to know about the status of the school's environment and conducive learning culture. The details of principals' gender, age, education, and their experience are given in the following table 1.

Table 1

#### *Detail of Participants on Demographic Variables*

Sr.	Variable	Level	n	%	Total %
1.	Gender	Males	2	25	100
		Females	6	75	
2.	Age	Below 35	3	37.5	100
		Above 35	5	62.5	
3.	Education	B.A, B. Ed	1	12.5	100
		M.A, B. Ed	2	25	
		M.A, M. Ed	4	50	
		M. Phil	1	12.5	
4.	Experience	6-10 years	5	62.5	100
		11-15 years	3	37.5	

Table 1 shows the details of the principals of Pehli Kiran Schools like gender, age, education, and experience. Two principals (25%) were males and six (75%) were females. Three principals were below 35 in age and five were above 35 years. One principal was BA, B.Ed., two were MA, B.Ed., four were MA, M.Ed, and one was M.Phil, which shows that many principals were highly qualified. Five principals had 6-10 years' experience and three had 11-15 years' experience. Overall, predominantly male principals, mostly middle aged, well qualified with a moderate level of experience.

### Methods of the Study

There were two methods employed to capture evidence to address the scope of the study:

1. Curriculum analysis framework
2. Semi-structured interview



The curriculum document of grade 5 was analyzed keeping in view the middle-level class to see the provision of 21st-century skills in the content. It included curriculum document focusing content, scheme of studies, academic materials, and planner for co-curricular activities of PK Schools. A framework for content analysis was developed through an extensive literature review to analyze content across the curriculum document to see the relevance of material, activities, planners, and co-curricular activities with 21st-century skills. The framework was employed as a tool for identifying relevant concepts or inferences from the texts related to 21st-century intended skills or given qualitative data (Salkind, 2010). This framework finds out the relevance between different components of the curriculum and desired competence for 21st-century skills. The framework comprised the first column for the serial number, a second for essential components, a third for indicators, a fourth for status of availability, and fifth to seventh columns consisting of scale i.e., relevant, partially relevant, and irrelevant. In total, it is comprised of 54 items. There is much precedence in the literature that content analysis frameworks were used to see the relevance of different competencies in previous researchers (Alismail and McGuire, 2015; Iqbal and Tatlah, 2022; Tareen and Jalal, 2022). It was validated by six subject experts. Its S-CVI value was 0.98.

The principals of eight schools were interviewed to explore the quality, environment, and class management of schools. Interviews allowed a better understanding of the phenomenon (Darling-Hammond, Newton & Wei, 2010). The semi-structured interview was developed based on measures used in some previous research (Farooqi, Farooq, Saleem, Akhtar & Akram, 2015; Arshad, Haq, and Khan, 2020). It consisted of a total of 20 questions: 4 questions for human resources, 4 questions for physical resources, and 12 questions for the provision of quality education, learning environment, teachers' development, and management of classes. It was validated by six subject experts. The CVI was calculated with a 0.92 index.

### **Data Collection and Analysis**

The curriculum includes the scheme of studies, planners of co-curricular activities, and books collected from the concerned schools for analysis. The researcher used a content analysis framework for curriculum analysis. A content analysis examines whether the content meets the immediate and long-term needs of the students or not with respect to 21st-century skills.

The principals of Pehli Kiran Schools were contacted telephonically and requested for interview. The researcher personally visited the informants to conduct face-to-face interviews. Interviews were recorded with the consent of the interviewees. Recorded interviews were transcribed, and analyzed through coding, generating themes and subthemes. The thematic analysis helped to draw a conclusion regarding the availability of resources, teachers, quality of education, and the environment of schools.

## Research Findings

The data were analyzed according to the nature of the data. For instance, the first curriculum analysis was made. Secondly, the interview data were analyzed against available facilities and schools' information about different aspects like quality of education, administration, and teacher's role in developing a conducive environment to develop 21st-century skills among street-connecting children.

## Curriculum Document Analysis

The curriculum document of grade five was analyzed and results are presented against the scheme of studies relevant to desired skills of this age, content relevant to 21st-century skills, academic material being used for developing 21st-century skills, and planer of co-curricular activities. The single national curriculum used in PK schools. Moreover, the school administration devised a scheme of study and planners for co-curricular activities. The teachers planned their lessons daily. The researcher used a framework for content analysis to analyze the availability and relevance of different components of the curriculum (Content, academic materials, scheme of studies, and planning for co-curricular activities).

Table 2

### *Elements of Scheme of Studies and Their Relevance with 21st-century Skills*

Skills/Outcomes	Elements	Status		R	PR	IR
		Y	N			
Collaboration	Learning activities planner	✓	-	✓	-	-
Communication	Co-curricular activities planner	✓	-	✓	-	-
Creativity						
Character Citizenship	Plan for Celebration of important events	✓	-	✓	-	-
Collaboration	Schedule of assessments	✓	-	✓	-	-
Critical Thinking	Teaching methods (Inquiry methods, Discussion method etc.)	✓	-	✓	-	-

Key: Y=Yes N=No R=Relevant PR=Partially Relevant IR=Irrelevant

Table 2 shows the availability and relevance of elements of scheme of studies with 21st-century skills. The scheme of studies was sound, covering all skills related to this age. It contained learning activities planners, co-curricular activities planners, plan for celebration of important events, schedule of assessment and interactive teaching methods which are significant to develop collaboration, communication, creativity, character building, citizenship, collaboration, and critical thinking. It seemed that the scheme of studies pertains to such activities and material necessary to develop the required skills. However, the elements were available and quite relevant for developing 21st-century skills among street connected children.

Table 3  
*Elements of Content and Their Relevance with 21st-century Skills*

Skills/Outcomes	Elements of Content	Status		R	PR	IR
		Y	N			
Character	Illustrations from history (Hazrat Muhammad S.A.W)	✓	-	✓	-	-
	Instructions regarding character building (Ahadith)	✓	-	✓	-	-
	Descriptions (character-building traits)	✓	-	✓	-	-
	Nazra Quran (Ayats of Holy Quran)	✓	-	✓	-	-
	Moral Stories (Hazrat Noah A.S, Hazrat Daud A.S etc.)	✓	-	✓	-	-
Communication	Writing tasks/ activities in the textbooks of Urdu and English	✓	-	✓	-	-
	Listening and Speaking Activities in the textbooks of Urdu and English	✓	-	-	✓	-
	Dialogues for conversation and practice	✓	-	-	✓	-
	Essay writing	✓	-	✓	-	-
Critical Thinking	Quantitative questions in Math	✓	-	✓	-	-
	Problem-solving sums	✓	-	✓	-	-
	Geometry section in Mathematics	✓	-	✓	-	-
	Historical tracking of past events	✓	-	✓	-	-
	Open ended questions for scientific concepts	✓	-	✓	-	-
	Comprehension activities	✓	-	✓	-	-

Key: Y=Yes N=No R=Relevant PR=Partially Relevant IR=Irrelevant

The key element in the teaching-learning process is the content. It is pertinent that the subject matter should reflect the content that is required to develop intended skills among children otherwise all effort is wasted. Education is the source which can inculcate skills among students to become better members of society. The understanding of daily life concepts should be reflected in students' practices. Table 3 clearly shows the availability and relevance of the content elements in relation to character, communication, and critical thinking. There is extensive content available in different subjects of grade five like; Islamiyat, Urdu, English Science and Mathematics related to character building, communication, and critical thinking. The communication skills related to listening and speaking activities are partially relevant in the textbooks of Urdu and English in the form of dialogues.

Table 4  
*Nature of Academic Materials and Their Relevance with 21st-century Skills*

Skills/Outcomes	Academic Materials	Status		R	PR	IR
		Y	N			
Citizenship	Videos/audios (National song etc.)	✓		✓	-	-
	Lectures on different topics (like patriotism)	-	✓		-	-
	Charts related to rights and responsibilities of a good citizen	✓	-	✓	-	-
	Flashcards related to qualities of a good citizen	✓	-	✓	-	-
	Posters (Keys to Citizenship)	✓	-	✓	-	-
	Banners (Responsible citizens display banner)	✓	-	-	✓	-
Communication	Audios/Videos	-	✓	-	-	-
	Movies	-	✓	-	-	-
Critical Thinking	Animations	✓	-	✓	-	-
	Simulations	✓	-	✓	-	-
	Cross word puzzles	✓	-	✓	-	-
	Work sheets	✓	-	✓	-	-
	Assignments	✓	-	✓	-	-

Key: Y=Yes N=No R=Relevant PR=Partially Relevant IR=Irrelevant

Table 4 shows the availability and relevance of academic materials for citizenship, effective communication, and critical thinking. Most of the academic materials according to the scheme of the study are available and relevant. It has enough space to develop specific skills among street-connected children. There is no academic material related to the development of communication skills in street-connected children. The lectures on specific topics to develop patriotism are also not available in academic material. The movies and audio video type material are also missing which can contribute to developing different skills among students. In addition to this, it can develop interest among street-connected children to retain and learn through live observations.

Table 5  
*Planner of Co-curricular Activities and their Relevance*

Skills/Outcomes	Co-curricular Activities	Status		R	PR	IR
		Y	N			
Character	Lunch sharing activities	✓	-	-	✓	-
	Seminars		✓	-	-	-
Citizenship	Act/ plays	✓	-	✓	-	-
Collaboration	Peer work	✓	-	✓	-	-
	Group tasks	✓	-	✓	-	-
	Sports and Games	✓	-	✓	-	-
	Workshops		✓	-	-	-
Communication	Assembly	✓	-	-	✓	-
	Speeches	✓	-	✓	-	-
	Debates	✓	-	✓	-	-
Creativity	Practical work	✓	-	✓	-	-
	Model making	✓	-	✓	-	-
	Art & Craft	✓	-	✓	-	-
	Drawing & painting	✓	-	✓	-	-
	Writing competitions	✓	-	-	✓	-
Critical Thinking	Math clubs	-	✓	-	-	-
	Spelling bees	-	✓	-	-	-
	Mental math tests	✓	-	✓	-	-
	Problem-solving task	✓	-	-	✓	-
	Storytelling	✓	-	✓	-	-
	Field Trips	✓	-	✓	-	-

Key: Y=Yes N=No R=Relevant PR=Partially Relevant IR=Irrelevant

The importance of co-curricular activities to students' mental and physical health cannot be denied. Table 5 clearly shows that most co-curricular activities were listed in the planner and are related to specific skills/outcomes. Skills like character building, citizenship, collaboration, communication, creativity, and critical thinking are covered through different activities given in the planner of co-curricular activities. Activities like lunch sharing can be helpful in character building; act/plays for developing citizenship; peer work, group tasks, sports and games, assembly can help in collaboration; speeches and debates can develop communication skills among street-connected children; practical work, model marking, art, and craft, drawing and painting writing competitions develop creativity; metal math tests, problem-solving tasks, storytelling, and field trips are helpful in developing critical thinking among students. Seminars, workshops, math clubs and spelling bees are not made available in the PKS. Moreover, lunch sharing activities, assembly, writing competitions and problem-solving tasks are partially focused. Overall, the PK is well equipped with different sorts of activities which are directly helpful in developing different skills desired in the 21st-century.

### Interview Data Analysis

The interview data were analyzed and presented against available facilities, quality of education, role of administration and teachers in developing 21<sup>st</sup>-century skills in following four tables.

#### Available Facilities

The available physical facilities in PK schools are presented in table 6.

Table 6  
*Detail of Facilities Available in Pehli Kiran Schools*

Sr.	Facilities	Status of availability of facilities	
		Yes	No
1.	Drinking Water	8	0
2.	Toilets	8	0
3.	Tuck Shop	3 (PKS-5, PKS-7, PKS-8)	5
4.	Electricity	8	0
5.	Tube Light	8	0
6.	Fans	8	0
7.	ICT	6	2 (PKS-4, PKS-9)
8.	Furniture for Office	8	0
9.	Furniture for Students	0	8
10.	Play area for Students	8	0
11.	Mobile library	8	0
12.	AV Aids	8	0
13.	Multimedia	0	8
14.	Transport	0	8

Drinking water is available in all schools along with the provision of toilets. All schools have electricity, tube lights, and fans. Six schools had access to ICT while office furniture was provided to all schools, but no school has furniture for students. The Tuck Shop facility is available in three schools only. Every school has a designated area where students can play and learn. Additionally, there was a computer lab and an office in each school. These schools have a mobile library that transported among these schools provided the students with a variety of literature. AV aids were available in all schools, and they were also used in a beneficial manner. No school used multimedia. Transport was not available for students. The Pehli Kiran Schools had an average of eight teachers per school. They also include volunteers and alumni. The student-teacher ratio was 28:1. The average number of students in a school at the primary level was around 350.

### Provision of Quality of Education

The PK Schools data regarding provision of quality education is analyzed and presented in Table 7. The themes, sub-themes, and evidence are given below:

Table 7

*Provision of Learning Environment to Street-Connected Children in Pehli Kiran Schools*

Themes	Sub Themes	Evidence from data
Use of motivational techniques	Intrinsic motivation	Positive remarks Uplifting the morale Sense of success and responsibility
	Achievement motivation	Offering rewards Appreciation certificates
	Power motivation	Assigning responsibilities Increasing status among others
	Positive attitude	Using full potential and resources Using students' interest
Enthusiastic teaching	Tracking progress	Establishing clear goals Promoting growth
	Activity base teaching	Making learning a fun Interactive games and activities
Supportive learning	Real life learning	Conceptual learning Experiential learning Context based experiences
	Individual differences	Discovering exceptionalities Considering psychological needs Focusing educational needs
		Deeper learning
Meaningful evaluations	Formative evaluation	Routine assessments Analyzing behavioral changes Offering constructive feedback Use of interactive method
		Summative Evaluation

The provision of a favorable learning environment in PK schools is clearly visible in table 7. The approaches to create a conducive learning environment are motivational techniques, enthusiastic teaching, supportive learning environment, focusing learner's needs and meaningful evaluation. Teachers as well as students are provided intrinsic achievement motivation and power motivation. Teachers have a positive attitude towards street connected children and use their full potential and resources to make teaching and learning fun. Clear targets are placed and followed by the teachers through engaging and developing interest of the street connected children. Students are provided an activity based supportive learning culture to develop their

understanding of the new concepts in hand. They relate conceptual genre with the contextual information and daily experiences of the students to make connections and get them understood. They always focus on street connected children's individual needs and address challenges being faced by the street connected children during the class. Their learning difficulties, understanding problems and conceptual confusions are addressed by the teachers simultaneously.

They involve each student in the teaching process to enhance their understanding. Teachers frequently ask questions to know their learning and give spontaneous feedback. Keeping in view of students' needs and determining their level of learning, assessments are made. The assessments are conducted during the process of teaching and at the end of unit, term, or year. The meaningful evaluations provide data like feedback about teaching methodology and students' learning to devise teaching strategy accordingly.

Table 8

*Role of Teachers to Keep Street-Connected Children Motivated in PK Schools' Classrooms*

Themes	Sub Themes	Evidence from data
Interactive pedagogy	Activity based teaching	Engaging the students in lesson Learning through games and fun Real life experiences
	Two-way feedback	Effective discussion Asking questions Offering praise
Effective communication	verbal	Using positive words Encouraging initiatives Positives remarks
	Non-verbal	Use of clapping Eye contact Facial expressions Gestures
Rapport building	Verbal	Effective discussion Understanding the students' words Conversation Engagement with students Communication
	Non-verbal	Friendly behavior Eye contact Smiling face Understanding students' non-verbal behavior
Discovering Exceptionalities	Frameworks	Keeping the set schedules
	Individual differences	Focus on God gifted students Attention to slow learners Boosting confidence of exceptional students
	Medical issues Family problems	Mental and physical health issues Keeping in mind family circumstances



Considering Precipitating factors	Biological factors	Finding causes of behavior Hunger, thirst, sleep, or restlessness
	Psychological factors	Self-actualization Self esteem Love and belonging

Table 8 shows the role of teachers in maintaining student motivation in the classrooms. They employ interactive teaching methodologies with effective communication to engage street connected children during the class. They show high concern of being well-wished to the students and discover individual needs and challenges and plan to cope with them. Activity based teaching with prompt feedback engages students supported by real life examples. The classroom environment was welcoming for street-connected children. Some verbal and non-verbal means of communication were used to keep children motivated. Teachers build strong relationships with all students through individual attention like eye contact, passing smile and understanding student non-verbal behaviors. Teachers give special attention to underprivileged children using verbal and non-verbal means. They also kept in mind biological and psychological factors.

Table 9

*Role of Administration for Quality Teaching at Pehli Kiran Schools*

Themes	Sub Themes	Evidence from data	
Professional development of teachers	Induction	Improve selection/recruitment process	
	Placement	Allocation of classes	
	Training	Pre-service training In-service training	
Monitoring and supervision	Mentoring	One-on-one mentoring Peer mentoring Group mentoring E-mentoring	
		Assistance	Direct assistance Group assistance
		Teachers	Incentives/Awards/Rewards Appreciation Certificates Uplifting morale Providing required resources
Students	Cooperative attitude Praise/Appreciation Boosting up the morale Sense of responsibility Fair treatment Awarding scholarships		
Setting clear directions	Documentation	Establishing guidelines Clear objectives and expectations Documenting rules	

Table 9 shows how the administration helps PK schools to provide quality education and develop 21st-century skills. They mainly focus on the professional development of teachers and try to engage them in different courses from time to time. They focus on the recruitment process, induction and placement training, and pre-service and in-service training. They monitor all processes at PK schools and provide help where needed. Moreover, special attention to mentoring like peers, groups, and online support is also provided. They employ motivational factors to uplift the morale of teachers through incentives, appreciation certificates, providing required resources, and moreover cooperative and friendly attitude of the administration. Street-connected children are also attracted and retained at PK schools through support like appreciation, boosting their morale through positive feedback, developing a sense of responsibility, fair treatment with all students, and awarding scholarships on their performance basis. They have some clear guidelines and directions in document form which are followed by the schools like clear objectives and rules. The administration is highly supportive of attracting and engaging street-connected children in education.

### **Discussion**

The findings revealed that fewer physical and human resources were available in Pehli Kiran Schools. It was really very difficult to create an environment that was conducive to learning under extreme weather conditions. But despite these challenges, their workforce maintained high morale. They were attempting to deliver a high-quality education with a limited budget. To create a suitable learning environment, they used motivation, enthusiastic teaching by professionally trained teachers, and a supportive learning culture. For the development of 21st-century skills, the curriculum was found reasonably suitable. Each of its components was aligned with the others. The development of character, citizenship, teamwork, creativity, and critical thinking were also shown to be relevant through classroom interaction; however, communication skills were only moderately relevant. Teachers were found trying their level best and putting their maximum efforts into the development of 21st-century skills among street-connected children. They were found employing various strategies, enriching the teaching-learning processes, and enhancing classroom management by using a variety of techniques to develop skills among these students.

The results of the study by Ololube and Egbezor (2012) are aligned with this as they assessed the role/importance of non-formal education to human and national development in Nigeria. This study measured six group dimensions to determine the impact of NFE on literacy, skills, and reduction of poverty of OOSC, youth and adults. It also measured re-skilling and up-skilling citizens to increase productivity and national development. It was quantitative research and revealed that there was a significant

relationship between non-formal education and human and national development. In addition to this, another study in different context, Birdwell, Scot & Koninckx (2015) conducted research on whether non-formal learning could help to build character and close the achievement gap on young people from disadvantaged backgrounds in UK. The findings of the research were based on surveys of 14-18 years old youth, adult scouts, volunteers, head teachers and teachers. The study provided evidence that non-formal learning in different forms can have a definite impact on both education and character outcomes. However, there were some significant barriers in the way of ensuring access to good quality non-formal education activities. Policy makers, school leaders and teachers should seek to work more closely to meet the demand and fill the gap.

Moyer (2016) conducted research in Virginia to measure students' engagement in 21st-century learning and innovation skills while participating in a non-formal learning experience. The researcher was of the view that non-formal learning experience was strong in engaging students in 21st-century skills such as critical thinking and collaboration. It also engaged students in life skills such as leadership, problem-solving, flexibility and responsibility. It was claimed that non-formal education was not strong in engaging students in creativity and innovation.

Soeiro and Balasubramanian (2016) did research on 249 students at a private university in Malaysia. They considered that there were more needs to meet and enhance students today. They used the lens of student's perspective through the RASE Pedagogical Framework. The study covered the development of 21st-century skills among Asian students and how those skills were in-line with the P21 Framework. The findings show that Asian students extended their interest towards learning 21st-century skills such as collaboration, communication, leadership, and creativity. The study recommended that teachers should change their strategies to offer the students innovative experiences and real-life learning to improve their confidence. It also recommended that teachers should monitor the learning of students and provide opportunities to the students to practice their learning outside the classroom.

Selman & Jaedun (2020) evaluated the implementation of 4C skills in Indonesian subjects at senior high school level. They discovered to what extent the implementation of 4C skill reaches its effectiveness and revealed the supporting and inhibiting factors in the implementation of 4C skills in Indonesian subjects. They used discrepancy evaluation model. The data was gathered using a questionnaire and documentation. They concluded that lesson planning and its implementation were carried out well. According to students' perceptions, there were several inhibiting and supporting factors in the implementation of 4C skills including mutual help among

students, assistance provided by the teacher, source books and classroom instruction. They suggested schools' principals administer training and discussion sessions with their teachers to improve teaching-learning process and to implement 4Cs.

Paraskeva-Hadjichambi, Goldman, Parra, Lapin, Knippels and Dam (2020) discussed several characteristics of non-formal education and their relevance with citizenship in their study "Educating for environmental citizenship in non-formal frameworks for secondary level youth". They highlighted that non-formal education should contribute to environmental citizenship by providing the students with necessary skills like values, attributes, relationships with society, nature and country. They suggested some pedagogical tools such as place-based education, civic education, action competence, inquiry-based learning. The study also presented some challenges including time availability, networking, educator's motivation and societal rules.

Iqbal & Tatlah (2022) conducted a study about teacher's perceptions regarding single national curriculum. The results demonstrated that SNC will drive advancement in the twenty-first century and that it possesses the necessary skills and strategies, but it needs time to bring about significant improvements. Tareen & Jalal (2022) revealed importance of Single National Primary Level Science Curriculum (2021) in the development of students' 21st-century skills in their research. They also draw attention to the curriculum's advantages in meeting contemporary skill requirements. Curriculum facilitates teachers in helping students acquire these skills since it offers direction on objectives, subject matter, instructional strategies, and evaluation methods. The new curriculum emphasizes large-scale national assessments administered by the National Education Assessment System, flipped classrooms, precise descriptions of learning activities for instructors, and creative and problem-solving skills. The SNC 2021 explicitly states that three stages of cognition, namely knowledge (40%) and application (40%) and analysis (20%), may be covered. The curriculum appears to have covered every aspect of the subject.

### **Conclusion and Implications**

The present study examined how Pehli Kiran Schools are engaging street-connected children in learning 21st-century skills through non-formal education. Pehli Kiran Schools had less physical and human resources. Producing a conducive learning environment in harsh weather conditions was not possible. But their manpower kept high morale to bear such difficulties. They were trying their best to provide quality education with lesser resources. They provided quality education by motivating teachers and students, identifying the learners' needs and conducting meaningful evaluations and using motivation, enthusiastic teaching, and supportive learning culture for conducive learning environment. Moreover, they also utilized different strategies including

induction and training of teachers, mentoring, and monitoring of teachers, and motivation of teachers for developing effective teachers. Furthermore, they managed classes using interactive pedagogy, rapport building, setting effective limits, and identifying exceptionalities among students. Teachers and administration maintained students' motivation using communication and developing rapport. Secondly curriculum was found relevant for the development of 21st-century skills. All elements were aligned with one another. Content of books keeps most of activities necessary for developing required skills. The scheme of studies was found to be quite perfect. It was very detailed and quite relevant. It contained all necessary elements to engage students in learning contemporary skills of the era. It seemed to be a very good guide to every aspect of the curriculum. Most of the academic materials related to 21st-century skills were found discussed in their planners. They made use of audios, charts, flash cards and posters. Recorded lectures, videos and movies were not found. Furthermore, there were also found the use animations, simulations, crossword puzzles, worksheets, and assignments in their planners. Co-curricular activities regarding contemporary skills were also found in the planners. The following implications were made to develop and enhance skills among street connected children.

- To maintain conducive learning environment furniture should be provided to the students of Pehli Kiran Schools.
- Math clubs and spelling bee should be introduced for developing intellectual reasoning and critical thinking.
- Inter-school competitions should be introduced to foster collaboration and teamwork.
- For creativity, real-life experiences should be added more.

A possible extension of the study could be evaluation of teachers' professional development programs at Pehli Kiran Schools.

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