

Identifying The Future: Exploring Lived Experiences of Non-Formal Education Teachers Using 21st Century Skills

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Abstract: This study explores the experiences of non-formal education teachers in Islamabad, Pakistan, focusing on the use and impact of 21st-century skills. The research aims to Identify the most common 21st-century skills among these teachers, investigate how these skills influence teaching methodologies and student learning outcomes. Determine the specific training needs of non-formal educators to enhance their 21st-century skills. It employs qualitative methods approach to achieve a comprehensive understanding. A purposive sampling strategy will be used to recruit a diverse group of non-formal educators from various regions within Islamabad and representing different program types (Basic, secondary and vocational skills). Semi-structured interviews were conducted with participants to explore their lived experiences, perceptions of their 21st-century skills, and how they integrate these skills into their teaching methodologies. Thematic analysis was conducted on the interview transcripts to identify recurring themes and patterns related to teachers' 21st-century skills, their application in the classroom, and perceived challenges. By analysis of the data from interviews, the research identified the most common 21st-century skills among non-formal educators in Islamabad are communication and digital skills but lacking in life skills. Most of the teachers aware about teaching methodologies and learning outcomes but wants to learn updated skills to teach more effectively. Furthermore, this study highlighted age and experience-based variations

and program-specific considerations related to these skills. The findings shows there is a need to focuses on the development of targeted training programs tailored to the identified needs of non-formal educators, ultimately enhancing their ability to equip students with the critical skills they need to grow well in the 21st century.

Key words: *21st Century Skills, Non-Formal Education, Lived Experiences, Community Teachers*

INTRODUCTION

Teaching non-formal education (NFE) in Pakistan presents a challenging and tricky situation. The significance of NFE in addressing the educational needs of marginalized and underprivileged groups increases. However, Pakistan lacks enough certified NFE teachers, and the quality of teacher training programs differs. The shortage of skilled NFE educators remains a big issue. The government has taken steps to solve this such as setting up the National Institute of Non-Formal Education (NINE), which helps train NFE teachers, provides on-the-job learning, and offers ways to keep their skills current. Many NFE teachers have no knowledge of these programmes, and they do not benefit all of them. (UNICEF, 2019)

In Pakistan many NGOs and civil society organizations train NFE teachers alongside the government. These organizations play a key role in addressing the training gaps left by the government. However, the quality of NFE teacher training programs offered by these groups varies a lot. One major issue is the lack of a unified program used across the country, so the quality of training depends on the organization providing it. Another challenge is the shortage of skilled trainers for NFE. (Jumani, N., and Bibi F.) Formal schools emphasize knowledge that might not be useful or necessary, while NFE places its emphasis on building practical and realistic knowledge and skills (Debrah, Vidal, & Dinis 2021).

Many NFE trainers work part-time and lack proper training to handle NFE stress. It is crucial to understand the value of training and examine how experts encourage their staff. Teachers often gain less motivation or skill improvement during in-service training sessions compared to pre-service training. Researchers (Khushik F., & Diemer A., 2020) suggest replacing traditional training methods with creative ones to address the demands of modern teaching more.

Despite these challenges, Pakistan has seen some progress in training NFE teachers in recent years. For example, there is growing interest in creating NFE teacher training programs based on research and effective methods. More people now understand the value of giving on-the-job training and support to NFE teachers. In Pakistan many NFE teachers come from the same communities they serve. These individuals are selected because of their education, dedication to the community, and communication skills.

In some instances, NFE teachers may complete primary or high school, but they do not always require official teaching credentials. After being hired, they receive training to develop the skills necessary to teach. This training is often provided by the government, NGOs, or educational organizations. The training includes topics such as how to teach, designing curriculum, managing classrooms, and handling specific subjects. NFE teachers are also provided with lesson outlines and other materials to assist in their teaching efforts. (Bibi F., & Jamani, N., 2011).

These materials are designed to be simple for locals to access and use aligning with what they need and prefer. They may consist of textbooks, worksheets, and other resources created for the NFE programme. In Pakistan, NFE teacher training focuses a lot on learner-centered teaching approaches. Trainers encourage teachers to create lively and engaging learning environments that cater to diverse student needs. They are also trained to adapt their teaching methods to suit the local culture. NFE teachers need to keep learning and building their skills by continuing to grow. They often join training workshops, take refresher courses, or attend coaching sessions to improve how they teach and deal with difficulties in their jobs. In Pakistan, NFE programs check on teachers' performance and measure what students are learning. These evaluations help ensure that NFE teachers are doing their jobs well and point out where they might need extra help or training.

Non-Formal Education teacher training includes learning about subjects, creating curriculums, and working with communities. It focuses on understanding how to evaluate progress teaching adults, working with technology handling cultural differences, solving disputes, and building communication skills. Teachers learn methods to improve their work, check their growth, use resources, and handle moral or legal duties. This training gives NFE teachers the tools and knowledge needed to build learning spaces that include everyone and meet the needs of non-traditional learners

and their communities. It also encourages educators to grow in their careers and stay responsible for their teaching programs. (JICA Report on Teacher Training 2023).

The 21st century introduces rapid shifts in technology interconnected economies, and complex issues. Success today requires individuals to think, solve problems, and work well with others. People need to gather knowledge, apply it, and understand diverse cultures. Learning the skills needed to thrive in the modern era is key to succeeding both at work and in daily life. Innovation solving problems, and teamwork depend on these skills in the workplace. They also help people make smart life choices, whether it's about health, education, or the environment. The 21st Century Skills Partnership (P21 2015).

It is time that schools begin to impart the 21st-century skills so that kids become prepared to confront the globalized world. Collaborative effort is of greater significance in such a place because it is becoming so easy to access information by using search engines. This world continues getting transformed, and no one can guess the way it is going to happen. The students require curiosity, creativity, resilience and self control to deal with this uncertain future. They should also learn to be respectful of other opinions, values and perspectives. Teamwork is very essential. Being able to cope with failure, stay motivated, and care about their families, communities, and the environment should also be acquired by students as learning groups, networks, and teamwork are concentrated on learners and provided them with opportunities to learn and be able to manage their own learning (Castaño Muñoz et al. 2013). The most appropriate way of offering equal learning opportunities to all students is by working in collaboration with others (Graziano and Navarrete 2012).

The purpose of the Non-Formal Education programs in Pakistan is to equip individuals with basic knowledge and skills helping them to rise and increase their life and economic opportunities. The report of NFE statistics 2020-21 demonstrates the successes of NFE experts in the country and its provinces. According to this report, there are 40,696 NFE centers such as Non-Formal Basic Education, Accelerated Learning Programs, and adult literacy centers in Pakistan. The teachers in these centers are 42,873 on average and they have 1,615,176 students. These statistics indicate that 52 out of these students are in Punjab and Sindh contains 20. KPK and Balochistan have 17 and 6 percent of the students respectively, whereas AJK and ICT have the least number of students. In recent years, Pakistan experienced a clear increase in the number of NFE centers and teachers,

according to NFEMIS 2021. Students need to move to nearby formal schools to keep studying. NCHD manages feeder schools connecting them with other NFBE centers, which assist in mainstreaming depending on specific requirements (NFEMIS Report, 2016). To thrive in formal schools, students need various skills.

In today's world fast technology development, globalization, and shifting social and economic trends have reshaped the abilities needed to thrive in work and life. These skills often referred to as "21st-century skills," cover critical thinking, collaboration, communication, creativity, flexibility, and understanding digital tools. Most people believe these abilities are essential to tackling modern challenges.

People don't know how much NFE teachers in Pakistan possess, appreciate, or apply these skills when teaching. This missing knowledge leads to many problems.

The investigation of the abilities of 21st century among the NFE teachers would aid in ensuring that non- formal education would remain effective and responsive to the evolving needs of the learners who have limited access to formal schools. Non-Formal Education targets ones that have been left behind like adults, out of school youth and in remote localities. The proposed research is aimed at developing the skills of NFE teachers to help these people to become a part of the contemporary society where they could find more valuable job offers, and they could live better. Once incorporated in formal systems, such students can compete with their colleagues in the traditional schooling systems. NFE programs with a 21st century skills equip learners with the capability to survive in jobs and in tertiary education. This research plan aims at preparing NFE graduates in such a way that they can survive in workplaces and economic development. To come up with effective education policies and programs, we will require data which will tell us the areas that NFE teachers have succeeded at and the areas that they are performing poorly in the impartation of modern skills. The proposal provides a platform on which evidence-based policies regarding non-formal education can be developed. To delineate areas where the skills of teachers' lack, it is important to develop specific training programs, which would help to improve the quality of teaching. This is beneficial to learners with serious education problems.

The importance of understanding 21st -century skills among Non-Formal Education teachers is because it is an indicator of how the teachers should teach, against the current needs of the world. It enables the under-represented populations, improves the quality of teaching, and assists in the general social and economic development. The proposed research plan will allow closing the gap between current educational strategies and what learners really need. It showcases individual growth and creates greater society advancement.

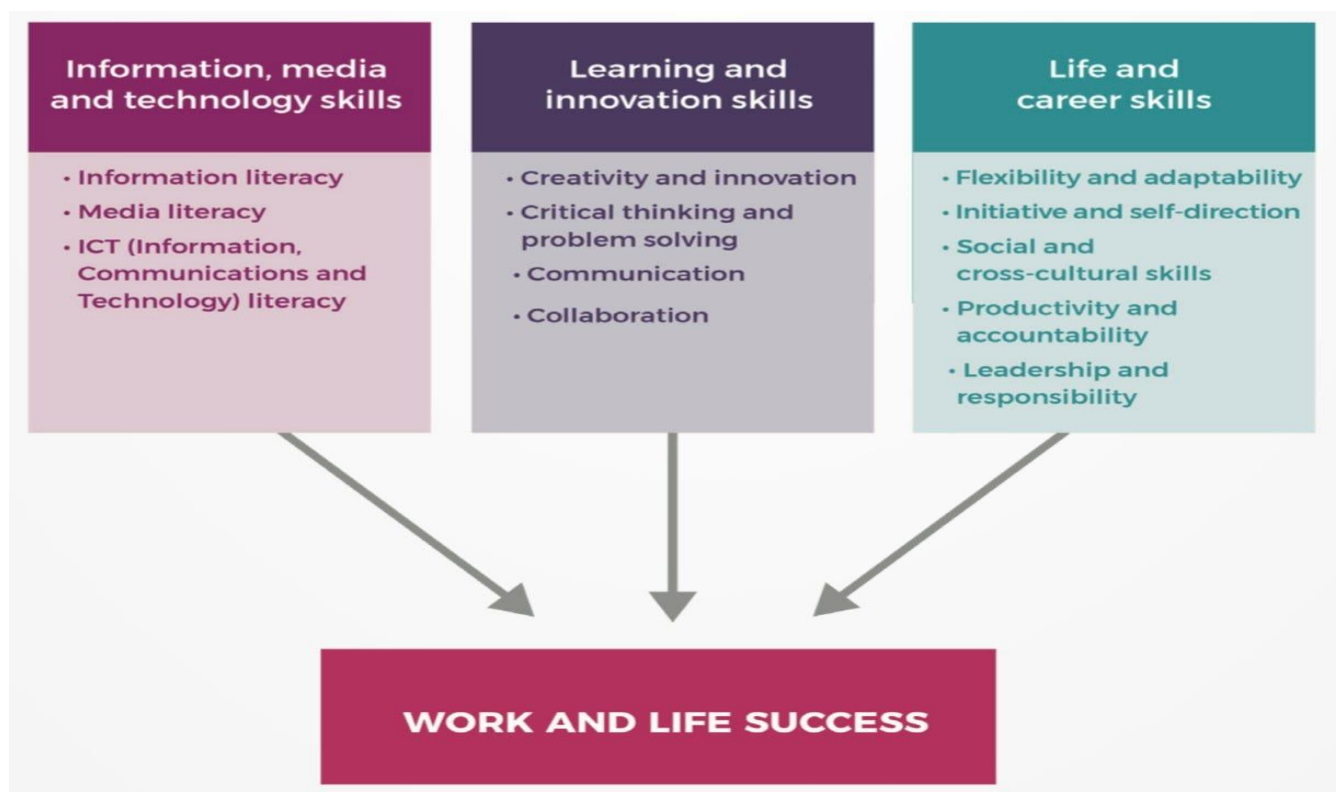


Figure:1 Categories of 21st Century Skills

Learning in the 21st century is transforming itself to attach importance on skills other than reading and basic arithmetic. The non-formal education is significant in that it provides learning opportunities that are non-constraining and reach everyone. There is, however, little knowledge about the predicaments faced by NFE teachers in Pakistan during this change. This paper explores their life and how they incorporate the 21st century skills in their pedagogy.

Research Objectives

- I. To ascertain the frequency with which 21st century skills are possessed among teachers in non-formal education in Pakistan and how they are used.
- II. To compare the effect of these skills in teaching and on learning results of students through non-formal education.
- III. To determine what training is needed by non-formal education teachers to improve their 21st-century skills.

Research Questions

- What are the most common 21st-century skills that teachers in Pakistan's non-formal education settings have? How do these skills change depending on the region or the kind of non-formal education provided?
- How do 21st-century skills affect teaching methods and learning outcomes in informal education settings throughout Pakistan?
- What kinds of training sessions can help teachers in non-formal education settings in Pakistan build better 21st-century skills? How might these programs change to fit the different needs of these educators?

The research explores the perceptions of teachers and the way they address the process of incorporating 21st century skills in non-formal education systems. Teachers hold that these skills will be very important because they will make the students ready to face a more advanced and technology-oriented world. Anagün, Ş. S. (2018). There is a tremendous difference in their knowledge of the necessary skills such as the ability to think, to be creative, to communicate and to collaborate. These are fundamental skills of learning and problem solving. Nevertheless, the number of educators that can incorporate these skills into their lessons is low. To them, there is a problem of lack of sufficient training, time constraints, or inappropriate teaching materials. The teachers experiment with various practices to impart these skills. They employ such tools as projects, group discussion sessions, and activities that are tech oriented. Such means are not effective in some cases due to the environment

related difficulties. Integration depends on the availability of the adequate resources and good support of schools.

Most teachers believe that they require proper training enhanced teaching resources as well as frequent encouragement to enhance their expertise. They also cite that collaborating with other educators, school administrators and local community builds a culture, which promotes innovation and lifelong learning. Teachers feel that the perception of the community and other major decision-makers towards their work will make them have confidence and will be willing to explore various forms of teaching. Their experience brings them into the realization that it is necessary to make the policies better, resource utilization, and the establishment of continuous training to help educate learners in the skills they require to achieve success in the modern world

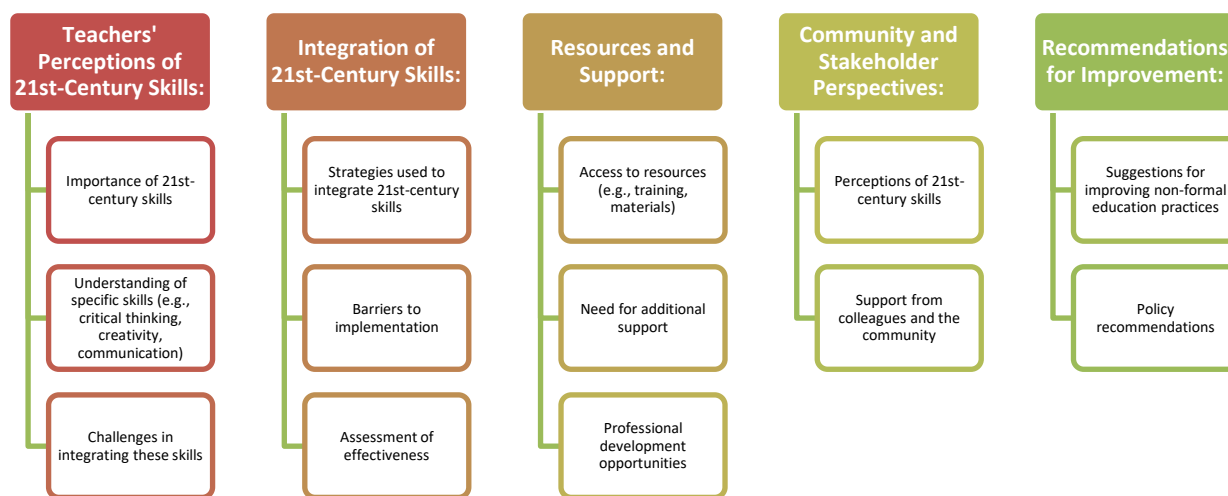


Figure:2 Themes of the study

Research Methodology

This paper discussed the incorporation of 21 st century skills in teaching by non-formal teachers via a qualitative approach. The researchers employed the method identified by Creswell and Poth (2018) to learn the personal experience, challenges, and special circumstances of these teachers. They went on to do semi-structured interviews collected to find detailed descriptions of the work of the

educators and their own experiences. The authors chose a diverse sample of NFEs who attached themselves to Japan International Cooperation Agency and Sanjh Pareet initiatives in Islamabad. Out of 47 respondents, they selected 20 teachers to be interviewed in a manner that ensured that there was a balance in the genders, ages, and the number of years worked as a teacher. They used thematic analysis to analyse the data whereby they used the six-step method by Braun and Clarke of 2006 to determine patterns and themes.

Key Findings and Discussion

The data analysis revealed four key themes that explain how teachers work with 21st-century skills in informal education spaces.

1. Teachers' Perceptions of 21st-Century Skills

Through this research, educators were able to appreciate the essence of the 21st century skills to equip learners to fit in a shifting world. Most educators were familiar with such concepts as critical thinking, creativity, communication, and collaboration, which are regarded as the skills one needs to master throughout his/her life (Partnership for 21st Century Skills 2019). But others acknowledged that it was difficult to put these skills into practice and incorporate it in non-formal classroom settings. These results correspond to the previous studies indicating that teachers are more conscious of 21st-century skills than they can implement them in practice (Anagun 2018; Voogt and Roblin 2012). The lack of time, the absence of teaching tools, and the fact that different students are ready were cited by the participants as the main obstacles to changes. Despite these challenges, they promised to be highly enthusiastic and eager to transform their teaching styles to fit the current education needs.

2. Integration of 21st-Century Skills

The study established that various teaching methods used by teachers, which included project-based learning, inquiry-based learning, and tech-supported activities, were used to produce 21st-century skills. The strategies will help the student to remain active and enhance their thinking and problem-solving (Bell 2010; Saavedra and Opfer 2012). Teachers had certain problems in common. They had to overcome low accessibility to digital tools rigid timetable provisions, and occasionally student or parent opposition because of being not knowledgeable about these contemporary methods. The previous research also highlighted the following challenges and the necessity to make the curriculums more flexible and to implement the school policies aimed at providing students with the opportunity

to become more engaged and excited in a classroom (Chalkiadaki 2018). The former methods were observed by the most of the teachers as successful when it comes to making students more active and enthusiastic in the classroom setting (Chalkiadaki 2018). This lends credence to the argument that enabling educators to create student-based learning environments would enable students to acquire skills that are more useful in the 21st -century (Trilling and Fadel, 2009).

3. Resources and Support

Educators received partial access to technology resources, training, and opportunities to work together with other professionals, but they claimed that their schools could have supported them more frequently. Most of them claimed that they were obliged to employ current pedagogical techniques that could be used to rely on updated internet, as well as more sophisticated training to enhance their instruction. These problems are like those presented by Schleicher 2018, who revealed that training teachers and providing them with the latest resources makes a significant contribution to skills-based education. In 2020, the OECD indicated that the resources and encouragement brought about by schools have the capacity to influence the degree of motivation and inventiveness of teachers in their instruction strategies. To make contemporary teaching fruitful, schools should have improved infrastructure and support of professional development in informal learning spaces.

4. Community and Stakeholder Perspectives

Participants said that most coworkers and people in their communities backed including 21st-century skills. They believed these skills are important to help students deal with real-world challenges. However, a few people questioned if these skills were practical or meaningful in areas with limited resources or among marginalized groups. This points to a bigger concern in studies, which explain how local values and cultures can affect the results of education reforms (Fullan, 2016). To build a shared goal around skill-based learning, it's essential to raise community awareness and involve everyone in the process. Bringing parents local organizations, and school leaders together could open up opportunities to share fresh ideas and encourage lifelong learning.

Recommendations for Improvement

Policy Enhancement

Specialists advise that policymakers allocate extra resources to help teach 21st-century skills using non-formal education methods. They propose revising curricula in all subjects to teach these skills

and providing ongoing teacher training (UNESCO, 2015). Increased funding and structured updates to curricula could align with global standards and ensure long-term progress.

Teacher Training

The study stresses how crucial it is to develop programs that allow teachers to grow by improving their teaching techniques and tech expertise required in today's classrooms. Darling-Hammond and colleagues (2017) emphasize that frequent training should include hands-on workshops, chances to work with mentors, and peer learning groups. These methods aim to boost teachers' confidence and make their lessons more innovative.

Technology Access

Strong tech infrastructure and equal access to digital tools are essential to support students and teachers. Schools need money to provide devices, software, and internet services. Proper use of ICT promotes active learning that puts students at the center (Voogt et al. 2015).

Community Engagement

Communities must take a stronger part in supporting movements that promote modern education. Awareness campaigns, working with local organizations, and encouraging involvement can show people how these skills benefit students as well as the entire community (OECD 2020). Bringing families and local leaders into the picture can help make education improvements more impactful and long-lasting.

Tracking and Reviewing

Setting up systems to track and review skill-based education programs matters a lot. Using data to check outcomes and make choices improves accountability and helps keep teaching methods practical and current (Fullan, 2016).

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Data Collection Tool

1. Age:

2. Gender:

3. How long have you been teaching in non-formal education settings?

4. What do you think are the crucial skills that teachers need the most in the 21st century?

5. How did you acquire these skills? (e.g., formal training, self-learning, etc.)

6. To what extent do you integrate these 21st-century skills into your teaching methods?

7. What challenges do you face in applying these skills in your teaching environment?

8. How do you assess the effectiveness of 21st-century skills in enhancing student learning?

9. In what ways do you think these skills impact your student's readiness for the future job market or further education?

10. What resources do you currently have access to that support the development of these skills?

11. What additional resources do you think would help you better integrate these skills into your teaching?

12. How do you stay updated with the latest educational technologies and teaching methods?

13. Can you share a recent example where you effectively used 21st-century skills in your classroom?

14. How do your colleagues and the community view the importance of 21st-century skills in education?

15. What are your suggestions for improving non-formal education practices concerning 21st-century skills?

16. Any other Comments
