SOCIETY FOR ACCESS TO QUALITY EDUCATION SAQE

Center for Universal Education at BROOKINGS | NEST

LEARNING WHAT MATTERS IN PAKISTAN

RETHINKING SKILLS AND EDUCATION SYSTEMS TRANSFORMATION

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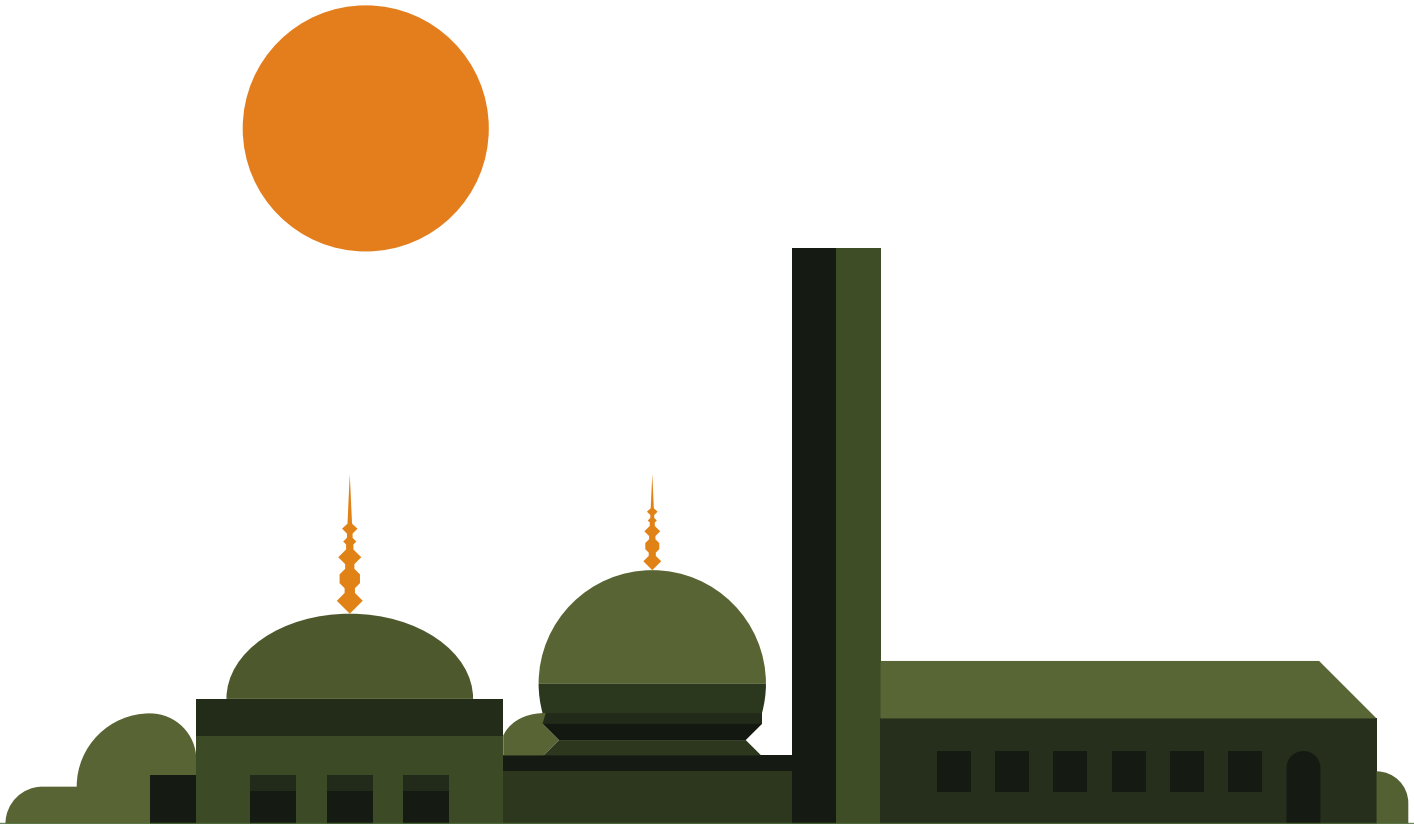
ACRONYMS

CPD	Continuous Professional Development
CUE	Center for Universal Education
FGDs	Focus Group Discussions
ICT	Islamabad Capital Territory
ICT	Information and Communication Technology
KIIs	Key Informant Interviews
NEST	Network for Education Systems Transformation
PCE	Pakistan Coalition for Education
PESPs	Provincial Education Sector Plans
SAQE	Society for Access to Quality Education
SMCs	School Management Committees
SNC	Single National Curriculum
TIMSS	Trends in International Mathematics and Science Study
TVET	Technical and Vocational Education and Training

ABOUT SAQE

The Society for Access to Quality Education (SAQE) is an education advocacy-based nonprofit established in 2010 in Pakistan. SAQE's mission is to institutionalize free, quality education for all by bridging policy gaps and combining research, evidence-based advocacy, and policy dialogue. Through its flagship network founded in 2025, Pakistan Coalition for Education (PCE), SAQE has been working on evidence-based education policy reforms for the past two decades, cultivating an extensive network spanning 65 districts and 1,500 Union Councils nationwide. SAQE is a member of the Network for Education Systems Transformation (NEST). The principal leads of this report partnered with the Center for Universal Education (CUE) at the Brookings Institution as part of the NEST Pakistan study.



ABOUT THIS SERIES[1]

How well are education systems creating opportunities for children and young people to learn what matters?

Education systems worldwide face mounting pressure to prepare children and young people not just for academic success, but for meaningful participation in an increasingly complex world (UNESCO 2023). Growing evidence suggests that to navigate the challenges and opportunities of the 21st century, children and young people need a broad set of skills, including but not limited to literacy, numeracy, critical thinking, collaboration, creativity, socioemotional learning, and civic engagement (Dweck, Walton, and Cohen 2014; Martinez 2022; Radó 2020).

The Network for Education Systems Transformation (NEST), a global impact network[2] co-led by the Center for Universal Education (CUE) at the Brookings Institution and ten civil society organizations across Africa, Latin America, the Middle East, and South Asia, seeks to understand how education systems can transform to prioritize a "breadth of skills" —an integrated set of academic, socioemotional, and transversal competencies that enable all children and young people to thrive (Care, Anderson, and Kim 2016; UNESCO n.d.).

Central to our work is a shared exploratory question: How well are education systems creating opportunities for children and young people to learn what matters? This question acknowledges that, while concepts like "education systems," "opportunities," and "what matters" may differ across contexts, what binds the network is our collective commitment to understanding how education systems can transform to prioritize the development of a breadth of skills in all children and young people. Rather than prescribing universal definitions, NEST embraces locally grounded interpretations that honor the historical, cultural, political, and socioeconomic realities of each setting.

1. The introductory section includes common language for the sections "About this Series, "Framing Our Inquiry," and "About this Report" across all the reports in the NEST "Learning What Matters" series. The original source is "Learning what matters in Kenya" (Gikandi et al. 2025).

2. Impact networks are complex living systems, made of interacting people, organizations, and ecosystems. In contrast to traditional organizations with linear processes and standard operating procedures, networks are dynamic, interconnected, and variable. For details about the model of impact networks, see Ehrlichman (2021).

FRAMING OUR INQUIRY: THE 4 Ps AND 3 Cs AS WORKING FRAMEWORKS

Informed by prior research from CUE at the Brookings Institution, NEST draws on two interconnected frameworks that guide our exploration of education systems transformation toward skills development. The 4P framework identifies four high-level domains of change in systems transformation: purpose, pedagogy, positioning, and power (Sengeh and Winthrop 2022; Winthrop, Morris, and Qargha 2023). The 3C framework proposes three catalytic conditions believed to enable and sustain the transformation process: commitment, capacity, and cohesion (CUE 2022; Olateju et al. forthcoming).

We approach these frameworks not as prescriptive models, but as working theories that require interrogation, adaptation, and potential expansion based on observations in diverse local contexts. Our methodology is deliberately abductive, that is, moving systematically between observation and theoretical inference while remaining open to alternative explanations and framework modifications. This approach reflects NEST's commitment to collaborative inquiry that is iterative, values local knowledge and expertise, and contributes to a broader understanding of education systems transformation. We recognize that meaningful change cannot be externally imposed, but must emerge from genuine engagement with local realities, assets, and constraints.

ABOUT THIS REPORT

The following country-level findings represent an early stage of inquiry in NEST's ongoing exploration of education systems transformation for skills development. Exploratory in nature, the insights emerging from Pakistan's unique context are an initial step toward a shared understanding of its education landscape. While findings of this research may not be directly transferable to other settings, we believe that the patterns, tensions, and possibilities identified in this report can inform broader conversations about how education systems worldwide might better support all children and young people in developing the skills they need to thrive.

As NEST continues its collaborative work across ten countries, subsequent studies aim to deepen these insights and further refine our understanding of what enables sustainable education systems transformation toward a breadth of skills. As such, the following report should not be read as a final statement, but as part of an ongoing, iterative process of learning and discovery that contributes to an emerging field.

EXECUTIVE SUMMARY

Despite repeated rounds of education policy reform, a significant gap persists between policy aspirations and learning outcomes in Pakistan. Empirical studies indicate that approximately 80% of children at the late primary stage cannot read and understand an age-appropriate text (World Bank 2024). While this figure is striking, comparable—and in some regions higher—learning poverty rates have been documented across South Asia (78%) and sub-Saharan Africa (89%), suggesting that the challenges Pakistan faces are part of a broader learning crisis in low- and middle-income countries (World Bank et al. 2022).

While national frameworks in Pakistan such as the Single National Curriculum (SNC) and local frameworks such as Provincial Education Sector Plans (PESPs) articulate aspirations for 21st-century competencies, existing research points to a gap between these aspirations and the opportunities available to learners in the classroom (Khurram 2025).

This qualitative study examined how and why this gap persists, guided by NEST's shared exploratory question: how are education systems creating opportunities for children and young people to learn what matters? Data were collected across Pakistan's four main provinces and the Islamabad Capital Territory (ICT) through five focus group discussions (FGDs), 15 key informant interviews (KIIs), nine semi-structured interviews, and two non-participant field observations.

The study's 59 participants included teachers, policymakers, parents, curriculum and assessment experts, civil society representatives, and program representatives from Technical and Vocational Education and Training (TVET) institutions.

The findings revealed that opportunities to learn what matters are significantly constrained across five interconnected themes: (1) policy and purpose; (2) curriculum and pedagogy; (3) assessment systems; (4) governance; and (5) resource flows. Existing literature and study participants consistently pointed to limited system-level commitment to a broad educational purpose, considerable constraints in teacher preparation, infrastructure, and assessment design, and weak alignment across the actors and governance levels responsible for delivering change. These conditions were found to be mutually implicated across all five themes. Therefore, the data do not support attributing any single challenge to one isolated cause but rather point to how these conditions interact and compound each other in ways that collectively constrain systems transformation.

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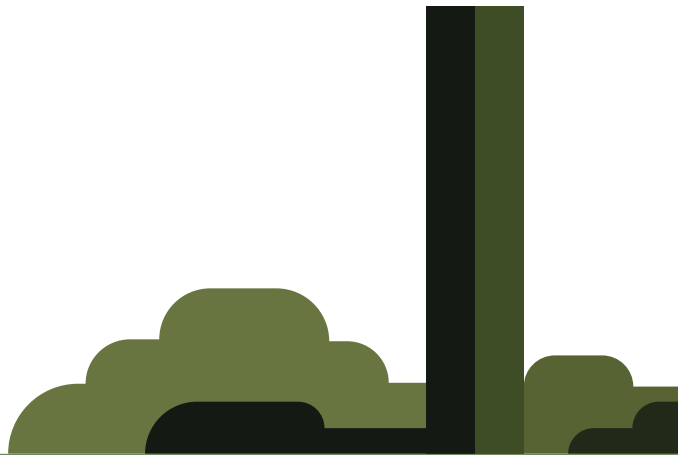


The recommendations draw on the 4P framework (purpose, pedagogy, positioning, and power), an action framework developed by CUE, to capture the key domains through which education systems move toward transformation (Sengeh and Winthrop 2022). The report provides four recommendations for local policymakers: clarifying the purpose of education through participatory mechanisms; reforming pre-service and in-service training around competency-based, inquiry-led, and experiential approaches; aligning all system components behind a common educational purpose; and redistributing power among the actors who define and shape learning opportunities and outcomes.

CONTEXT AND CONDITIONS

Pakistan faces one of the world's most significant education crises in both access and quality. With an estimated 25 million children out of school, Pakistan has one of the highest out-of-school populations globally (UNICEF 2023). This figure disproportionately affects girls, children in rural areas, and those from the poorest households—populations for whom the barriers to entry include poverty, geography, safety concerns, and perceived irrelevance of what schools offer. Among those who do attend school, available data point to a significant gap between policy aspirations and actual learning outcomes. Empirical studies indicate that approximately 80% of children at the late primary stage cannot read and understand an age-appropriate text (World Bank 2024). Additionally, in 2019, only 27% of fourth-grade students met the low international benchmark in mathematics on TIMSS,[3] placing Pakistan among the lowest-performing countries in the assessment (Halai 2021).

With an estimated 25 million children out of school, Pakistan has one of the highest out-of-school populations globally.

The National Achievement Test report, based on 2023 assessment data, further revealed that fourth grade students correctly answered only 56.1% of English, 49.4% of Mathematics, and 68.1% of Urdu/Sindhi items on average (Pakistan Institute of Education 2024). Taken together, these figures suggest a persistent gap between policy aspirations and learning outcomes—one that repeated reform cycles have not yet successfully addressed.

Discourse surrounding 21st-century skills—which emphasizes the importance of competencies beyond academic subject knowledge such as critical thinking, creativity, collaboration, communication, digital literacy, and socioemotional skills—has gained prominence in global education in recent years (Care, Anderson, and Kim 2016; Pellegrino and Hilton 2012). In Pakistan, policy documentation and sector plans signal a shift toward broader learning goals and competencies.

3. Trends in International Mathematics and Science Study

Punjab's Education Sector Plan 2019–24 identifies the development of youth who are creative, constructive, communicative, and capable of critical thinking among its goals.

At the national level, the SNC emphasizes the development of analytical, critical, and creative thinking through activity-based approaches and integrates 21st-century skills across subjects (MoFEPT 2021). At the local level, the PESPs echo these aspirations. For example, Punjab's Education Sector Plan 2019-24 identifies the development of youth who are creative, constructive, communicative, and capable of critical thinking among its goals (Government of the Punjab 2020). Sindh's sector plans similarly foreground improved learning outcomes and a shift from rote, teacher-centered instruction toward child-friendly learning environments (Government of Sindh 2019).

However, a recurring pattern in Pakistan's education trajectory is the disconnect between what policies promise and system realities. Academic analyses of SNC subject content suggest that while 21st-century skills are referenced in curriculum documents, they remain inadequately operationalized in textbooks, classroom materials, and teacher guidance (Jamil et al. 2024; Mansoor and Din 2023). A systematic review of research spanning 2017-2024 identified that Pakistan's education policies appear promising on paper, but implementation consistently fails due to poor planning, lack of accountability, underfunding, political interference, and insufficient attention to contextual demands (Khurram 2025). Central to this gap are persistent structural problems including poorly resourced training institutions, curricula that emphasize theory and memorization over reflective practice, infrequent in-service training, and the absence of infrastructure for ongoing professional development (Siddiqui et al. 2021).

Assessment-curriculum misalignment is a recurring structural finding in the literature on Pakistan's education system. An analysis of exam items across ten years from Sindh's Boards of Intermediate and Secondary Education found that the overwhelming majority of assessments focused only on memorization and comprehension, with items frequently repeated word-for-word across examination cycles (Rind and Malik 2019). This dynamic is widely described in the literature as a negative washback effect—when examinations reward rote recall, teachers tend to narrow their instruction accordingly, sidelining the higher-order competencies that policies and plans aspire to cultivate (Rind and Malik 2019).

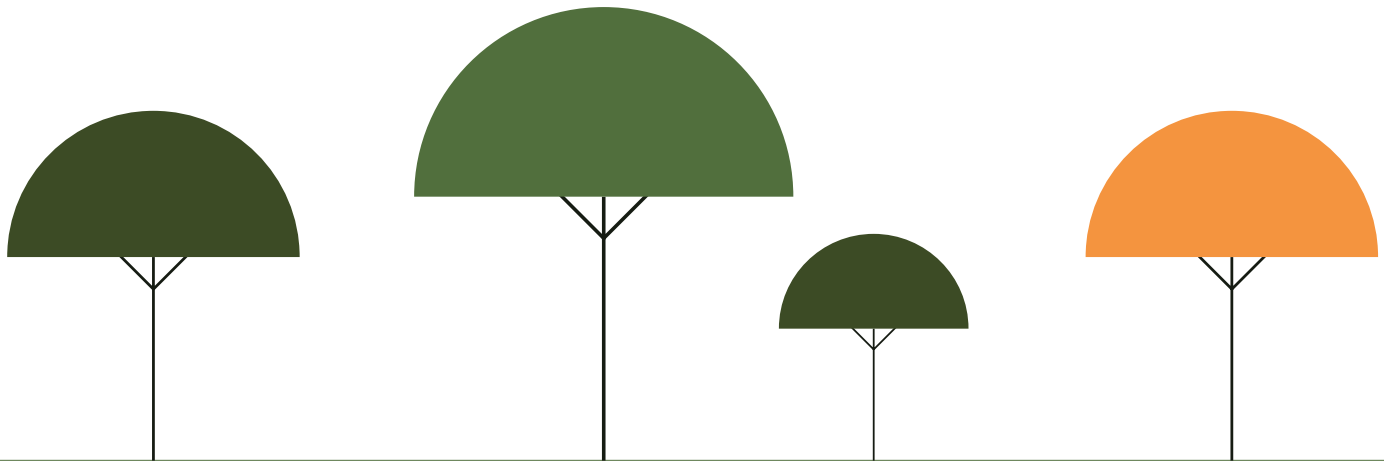
Pakistan's governance context adds further complexity. The 18th constitutional amendment, passed in 2010, devolved education to the provinces, granting them administrative, fiscal, and legislative autonomy. In principle, this made each province responsible for its own curriculum, teacher training, and assessment systems. In practice, it produced significant variation in implementation, with each province developing its own sector plans, textbooks, and examination structures. The federal government responded by centralizing curriculum authority through the creation of the SNC and the National Curriculum Council, justified on the grounds that provinces working separately had "not only created a disconnect between the education and training of the children of the nation but also affected quality and standards" (MoFEPT n.d.). The result is a nationally mandated curriculum that provinces are expected to

implement uniformly but with decentralized delivery structures that lack the capacity, resources, and in some cases, the political will to do so. Pakistan's education system thus remains characterized by a mismatch between a centralized vision and decentralized infrastructure and delivery systems.

While the structural challenges described above are well-documented in the literature, less is understood about how these conditions are experienced by the actors closest to the system, including teachers, parents, school leaders, policymakers, and community members. Existing research relies heavily on policy analysis, administrative data, and standardized assessments, which capture systemic patterns but not the lived realities, local adaptations, and ground-level constraints that shape what learning actually looks like across Pakistan's diverse provincial contexts. Through a qualitative, multi-province inquiry that centers participant experience, this study examined how the system's conditions affect access and quality of opportunities for children in and outside of school to learn what matters.

METHODOLOGY

This study is guided by NEST's shared exploratory question: How well is Pakistan's education system creating opportunities for children and young people to learn what matters? To address this question, the study utilized a qualitative research design intended to surface the experiences and perceptions of a purposive sample of education system actors across Pakistan's four main provinces—Punjab, Sindh, Khyber Pakhtunkhwa, and Balochistan—and the ICT. Data collection and analysis were guided by an abductive approach, moving iteratively between three sources of evidence—a desk review of policy documents, primary data collection with key actors, and field observations—and the 4P framework as an action framework for identifying what system-level changes would expand opportunities for children and young people to learn what matters.



Geographic scope and sampling

Purposive sampling was used to ensure variation across administrative tiers, geographic regions, and system actor roles, capturing diverse institutional and experiential viewpoints. This multi-site approach was adopted to reflect the significant geographic, administrative, and contextual variation across Pakistan's provinces.

PHASE 1: DESK REVIEW AND POLICY ANALYSIS

The study commenced with a desk review and policy analysis of 25 national and international documents, including general education policies, economic development strategies, curriculum frameworks, and PESPs to establish the conceptual and policy landscape (See full list in Annex 1). Findings from this phase informed the development of data collection tools, refinement of sampling categories, and identification of key stakeholder groups for primary data collection in phase two.

PHASE 2: PRIMARY DATA COLLECTION WITH KEY ACTORS

Building on insights from the desk review, primary data were collected through FGDs, KIIs, semi-structured interviews, and non-participant field observations. Data collection took place in February 2025 across the four provinces and the ICT. All interviews and FGD sessions were audio recorded, transcribed, and analyzed by the research team.

The table below provides a summary of participants by role, data collection method, and geographic representation. (See Annex 2 for a detailed list.)

TABLE 1: STUDY PARTICIPANT BY METHOD

DATA SOURCE/ RESPONDENTS	DATA COLLECTION METHOD	NUMBER OF RESPONDENTS	SITE/ LOCATION
Public school teachers	Focus group discussion (FGD)	5 groups (6-8 participants per FGD)	Islamabad Capital Territory (ICT) and four provinces
Education policymaker/ education department official	Key informant interview (KII)	5	One in each province and the ICT
Curriculum expert	KII	1	ICT
Assessment expert	KII	1	ICT
District administrator/ head teacher per region	KII	5	Selected districts across provinces and the ICT
Parents	Semi-structured interviews	5	Rural areas from provinces and the ICT
Industry/ private sector representative	KII	1	ICT
HR representative	KII	1	ICT
Academia/ university representative	KII	1	Sindh
NGOs/ civil society representatives/ education experts	Semi-structured interviews	2	ICT and Punjab
TVET center representatives	Semi-structured interviews	2	Sindh and Balochistan
TVET centers (case sites)	Non-participant observation and informal interviews	2 (case sites)	Sindh and Balochistan

FGDs were conducted with public school teachers, while KIIs targeted policymakers, experts, and administrators occupying positions with decisionmaking or oversight responsibilities. Semi-structured interviews were conducted with parents, civil society representatives, and TVET center representatives to expand contextual insights. For highly specialized roles such as curriculum and assessment expertise, single informants were selected based on their nationally recognized professional standing. Participants from TVET institutions included one center representative (program manager or administrative staff) from each of the selected skill development centers in Sindh and Balochistan.

PHASE 3: FIELD OBSERVATIONS AT TVET INSTITUTIONS

Two TVET institutions were selected as case sites for non-participant field observation: a public-sector institute in Sindh and a public-private partnership model in Balochistan. These sites were chosen to provide comparative insights into how institutional structure and governance arrangements shape vocational education and skills development.

Observations were conducted over two days at each site and focused on (1) infrastructure quality and equipment availability; (2) instructional methods and hands-on training delivery; and (3) gender composition of trainee cohorts. Data collection methods included non-participant observation of training sessions and facility walkthroughs, with informal discussions with center staff during site visits to clarify observed practices. Field notes were taken throughout and analyzed alongside interview and FGD data.

Data analysis

Thematic analysis was conducted iteratively across transcripts, field notes, and desk review materials. Five themes emerged from this process: (1) policy and purpose; (2) curriculum and pedagogy; (3) assessment systems; (4) governance; and (5) resource flows. These themes are grounded in the data rather than predetermined by the analytical frameworks and are analyzed in the findings section below using the 4P framework.

Ethical considerations and limitations

The study was conducted following strict ethical principles and informed consent was obtained from all research participants.[4] However, this study has several limitations inherent to its exploratory, qualitative design. Findings are based on a purposive sample and are not statistically generalizable to Pakistan's education system as a whole. As such, the findings are best understood as an in-depth account of the experiences and perceptions of the actors consulted. While the study made a conscious effort to include voices from different provinces, it may still fall short of reflecting the full diversity within each region.

In addition, the sociopolitical and security climate during the data collection period necessitated adjustments to the original study design.

Prolonged bureaucratic approval processes delayed access to schools, while heightened political instability including election-related disruptions and border tensions resulted in: (1) school closures; (2) teacher unavailability due to election duties and government-mandated training programs; (3) restricted access to some sites in Balochistan due to security protocols; and (4) cancellation of originally planned FGDs with parents (replaced with individual interviews) and of student consultations intended to capture youth perspectives on learning needs, including students with disabilities and gender-diverse youth. While these adjustments reduced geographic coverage and participant diversity, they did not fundamentally alter the study's ability to address the research question across Pakistan's major regions and stakeholder categories.

4. Participation was voluntary, and participants were informed of the study's purpose and their right to withdraw at any time. To ensure confidentiality and anonymity, all personal identifiers were removed, pseudonyms were used where applicable, and data were stored securely with restricted access.

FINDINGS

The five themes below emerged from the data and together point to why opportunities to learn what matters remain significantly constrained in Pakistan. These findings are not discrete observations but interconnected elements of a system whose components—policy, curriculum, assessment, governance, and resources—pull in contradictory directions.

1. Policy visions and the purpose of education

How education systems create opportunities for learning depends fundamentally on how the systems themselves define what matters and the purpose of education. In Pakistan, there has been a policy shift toward holistic, competency-based education that emphasizes higher-order skills, values, and socioemotional development. However, study participants consistently described policies as disconnected from the realities that shape daily instruction and classroom practices. A curriculum expert noted, "Even though the curriculum and documents advocate for critical thinking and creativity, systemic incentives and cultural expectations still push students toward memorization and traditional academic achievement."

"We hear about new books all the time, but we don't see any difference in what our children learn. It's the same content we studied decades ago."

Teachers consistently described a familiar pattern where policies arrive with ambitious language, but schools lack the resources, training, or structural support to translate the vision into practice. As one teacher reflected, "The plans are always good on paper. But in our schools, nothing changes. You cannot expect to send us new books and expect things to change overnight. We need support and resources to prepare us to deliver on these new demands. How can a teacher, insufficiently trained to use modern digital tools, teach digital skills to students?"

Parents echoed this concern, pointing toward superficial curriculum revisions that promise improvement but underdeliver. One parent shared, "We hear about new books all the time, but we don't see any difference in what our children learn. It's the same content we studied decades ago. It's just a matter of changing book covers and photographs. Our children are still learning old content. How will their future be any different when nothing fundamentally changes?" Officials described parents as associating educational quality with discipline, authority, and visible exam performance and expressing skepticism toward innovative digital approaches. A curriculum expert explained, "We introduced video lessons, but parents thought their children were just watching YouTube. There's a trust deficit when it comes to screen-based learning."

The gap between policy and practice described by participants demonstrates that while the purpose of education has evolved in policy documents, operational structures have remained largely unchanged.

An education official describes this dynamic precisely, stating, "Every new government announces education reforms with great fanfare. Policies are ambitiously created, big launches are held where ministers deliver speeches, but ask any child or teacher in a rural school about what has changed in their classroom, you'll get the same answer: nothing. The gap between what's committed in capitals and what happens in schools is enormous."

EDUCATION FOR WORKFORCE DEVELOPMENT

Beyond the policy-practice gap, the findings revealed a more fundamental mismatch among actors in how the purpose of education is conceived. Many participants described a prevailing discourse that positions education primarily as a pathway for workforce preparation rather than a process focused on the cultivation of capabilities for human flourishing. This instrumental framing limits what counts as valuable learning and the prioritization of 21st-century skills. As one respondent stated, "We see education only as a way to prepare students to earn a decent living. The larger goal of helping them become thoughtful and socioemotionally mature people has never been a priority."

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However, despite many participants describing the purpose of education as related to workforce preparation, TVET programs remain underfunded, underrecognized, and socially stigmatized. A provincial TVET sector representative stated, "TVET is seen as a last resort for students who don't do well in mainstream education. Technical education in our society isn't considered valuable. There's a stigma attached as if TVET diploma or certification makes one lesser than one with a degree. Until we change our mindset, the discussion on skills will remain marginalized." These findings suggest that Pakistan's education system remains firmly oriented toward what Biesta (2010) terms the "qualification" function—credentialing and examination performance—at the expense of "subjectification," or the development of independent critical judgment.

2. Curriculum, pedagogy, and teacher preparedness

Despite ambitious plans to promote holistic competency-based learning, participants across provinces described classroom practice as dominated by routines, syllabus completion, rote memorization, and passive student engagement over understanding, inquiry, and application.

THE ASSESSMENT CHALLENGE

Teachers consistently reported that although the standards encourage skills promotion, the system continues to reward memorization through assessments and accountability mechanisms. As one teacher explained, "We are told to encourage critical thinking, but we still get exam papers that reward memorization. So, we return to what we know, drilling students to recall answers. We have a huge amount of coursework to complete, and due to limited timelines, focusing on skill development doesn't benefit in any way."

"If a child asks too many questions, they're labeled disruptive. Teachers prefer students who nod along and memorize what they're given. In such a situation, pushing competency-based learning becomes almost impossible."

She further explained, "At the end of the year, we are judged by one thing: how many students passed. Not whether they understood a concept. Not whether they can apply their knowledge. Just pass percentages. So even if I want to teach differently, the system holds me back."

Classroom practice is further constrained by overloaded syllabi that are difficult to complete within a standard academic year. Instructional time is limited by frequent disruptions, including political instability, security dynamics, climatic disasters, and administrative responsibilities such as election duties. As one teacher explained, "With all the pressure to complete syllabus, intentionally doing practical activities or group discussions, becomes very hard. It's a race to cover all the required syllabus, within the limited time we have in a school year which is often reduced due to administrative burdens … ."

STRUCTURAL AND CULTURAL BARRIERS TO INQUIRY-BASED LEARNING

Beyond overloaded curricula and engrained assessment practices, societal and institutional norms further limit pedagogical change. Several respondents described cultural expectations that valued compliance over curiosity, patterns they identified as shaping classroom power dynamics and discouraging student agency. An NGO representative observed, "If a child asks too many questions, they're labeled disruptive. Teachers prefer students who nod along and memorize what they're given. In such a situation, pushing competency-based learning becomes almost impossible." Even where teachers recognize the value of skills-based approaches, they operate within environments that penalize deviation from established routines. Participants suggested these norms reflect deeper institutional resistance to pedagogies that redistribute authority within the classroom.

TEACHER PREPAREDNESS GAPS

Limited teacher preparedness also emerged as a recurring theme. Many teachers reported receiving no professional training beyond their initial induction. An 18-year veteran teacher in Badin reflected, "The only training I ever got was my induction. Since then, nothing. We are left to figure things out on our own." Additionally, teachers described both pre-service and in-service training as outdated, infrequent, and poorly aligned with the demands of competency-based education. Continuous Professional Development (CPD), where available, was often described as donor-driven, short-term, and disconnected from classroom realities. A former provincial director of education in Khyber Pakhtunkhwa emphasized the depth of this challenge, stating, "Training is still the weakest link in our system. Pre-service programs haven't evolved in years, and in-service training remains overly theoretical. There is virtually no preparation around digital skills or integrating problem-solving into subjects like science or social studies."

LOCAL COMMITMENT AMID WEAK INSTITUTIONAL SUPPORT

Despite these constraints, commitment to improved pedagogical practices often surfaced at the classroom and school level. Younger teachers, in

particular, described informal efforts to compensate for systemic gaps: sharing lesson plans through WhatsApp groups, pooling personal funds to access basic teaching tools, and experimenting with low-cost instructional innovations.

3. Assessment systems as gatekeepers

In Pakistan, study participants and existing literature consistently described assessments as mechanisms that stabilize and reproduce existing patterns, rather than instruments to measure and improve learning outcomes (Rind and Malik 2019).

RECALL-DRIVEN ASSESSMENT AND MISALIGNMENT WITH SYSTEMWIDE LEARNING GOALS

Examination boards were widely described as lacking the technical capacity required to design assessments that measure higher-order learning. Respondents across provinces reported that board examinations rely heavily on predictable, content-heavy questions, encouraging students to prepare through recycled past papers rather than engage deeply with curriculum concepts. An assessment expert explained in an interview, "Board exams mostly repeat the same kind of questions every year. Students just memorize past papers instead of really understanding the concepts. There is very little in the exams that pushes them to think deeply."

Teachers also reported limited exposure to innovative assessment approaches. A rural Sindh teacher admitted, "We don't know what formative assessment even means. We've never seen an example or had a workshop explaining it." During FGDs, teachers explained that formative assessments are more difficult to implement given high student-teacher ratios, which make individualized feedback and rubric-based evaluation impractical. In this context, pedagogy becomes tightly coupled with examination demands. Teachers teach what will be tested, and what is tested continues to privilege recall over reasoning. As established by the literature review, this reproduces the negative washback effect (Rind and Malik 2019).

This challenge extends well beyond pedagogy to broader questions of system accountability. An education activist summarized this dynamic succinctly, stating, "What gets measured gets noticed. If we're not measuring outcomes properly, how do we know we're achieving them?" While curricular and policy documents articulate expanded learning goals, assessment systems continue to signal that memorization remains the primary indicator of success. Some parents are beginning to recognize these limitations, but such perspectives remain marginal within a system where marks continue to dominate school accountability, parental expectations, and administrative decisionmaking.

"What gets measured gets noticed. If we're not measuring outcomes properly, how do we know we're achieving them?"

POWER IMBALANCES AND RESISTANCE TO CHANGE

Assessment systems also operate as powerful institutional incentives. Teachers reported that even when they attempted to introduce project-based or discussion-oriented tasks,

"We get applicants with degrees who can't explain basic concepts or solve practical problems. The system trains them to pass, not to think."

these efforts were often viewed as distractions from "serious" exam preparation. One participant shared, "Everyone only focuses on student results. If we try activities like projects or discussions, we are told that we are wasting time instead of serious (exam) preparation." This finding reveals a critical power imbalance. Although teachers are held accountable for results, they have very little influence over how achievement is defined or measured. Examination boards, meanwhile, face limited pressure or support to innovate. A participant stated, "We know the exams are outdated, but changing them requires approvals, money, training, and political will. It's easier to continue with what exists. So things stay the way they are."

IMPLICATIONS FOR LEARNING AND WORKFORCE READINESS

The consequences of a rigid assessment culture extend beyond schooling. Employers repeatedly described a disconnect between credentials and competencies. Participants shared:

"We get applicants with degrees who can't explain basic concepts or solve practical problems. The system trains them to pass, not to think."

"We don't just need graduates. We need people who can reason, troubleshoot, and adapt. We need youth with strong skills. However, increasingly we see that graduates fall short of our requirements, and we need to train them onboard."

These accounts suggest that assessment practices not only shape pedagogy but also mediate how learning translates into employability. Without reforming what is measured and how, other interventions in curriculum, pedagogy, or teacher development are unlikely to gain traction.

4. Systemic constraints and governance

The misalignments documented in previous themes—between purpose and practice, policy and pedagogy, and curriculum and assessment—reflect deeper systemic and governance failures. Rather than operating as a coordinated education ecosystem, key institutions were described by participants as functioning in silos with limited mechanisms for alignment or shared accountability.

FRAGMENTATION AND LACK OF SYSTEM COORDINATION

Respondents consistently highlighted the absence of formal coordination structures across reform actors. As an official from a Provincial Institute of Teacher Education explained, "There is no formal mechanism to ensure alignment between curriculum reforms, teacher training modules, and assessment frameworks. Each operates on its own timeline and mandate. So even when curricular shifts occur, assessment boards continue to prioritize rote-based questions, and training institutions aren't updated. This disconnect creates confusion at the school level and stalls reform."

Respondents also described governance instability as a persistent barrier to reform. Frequent regime changes disrupt policy continuity, resulting in cycles of

reform initiation without consolidation or scale. A curriculum expert noted, "Policies sound progressive, but they are just pretty documents without stable leadership and consistent funding. After every election, we restart from zero. Reforms are seasonal. They come, they go. Nothing sticks."

DECENTRALIZATION WITHOUT DEVOLUTION

While the 18th Amendment devolved responsibility for education to the provinces, respondents widely agreed that the intended benefits of decentralization—including greater responsiveness, local ownership, and innovation—have not fully materialized. Provincial governments have replicated centralized bureaucratic structures with limited authority delegated to districts and almost none reaching schools. A district official described this gap, sharing that, "Devolution was supposed to bring decisionmaking closer to schools, but in reality, authority stopped at the (provincial) secretariats. Districts are sidelined and schools have no flexibility to respond to local needs." Another participant echoed this dynamic: "We're told to implement policies made by people who have no idea about our local realities. When we raise concerns that 'this won't work here and these are the reasons,' we're told to make it work anyway. There is no room for local voices."

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Participants described this partial decentralization as having generated confusion rather than clarity due to overlapping mandates, fragmented accountability, and weak feedback loops. Schools face top-down directives without corresponding authority, resources, or discretion.

POWER ASYMMETRIES AND EXCLUSION OF GRASSROOTS VOICES

Participation mechanisms for teachers, students, parents, and communities during the reform process were described by respondents as minimal or absent. The rollout of the SNC illustrates these tensions. The reform process involved little meaningful consultation with those expected to implement or benefit from it, especially teachers as frontline implementers. When asked if they were consulted about curriculum changes, one parent shared, "I've never been asked about what should be taught or how schools should operate."

This reinforces the perception that reform is something done to schools rather than with them. Without vertical and horizontal alignment across governance levels, the data suggest that the provinces struggle to implement national reforms, and schools lack the individualized support required for implementation.

5. Resource flows and infrastructure

While the previous themes examined purpose, pedagogy, assessment, and governance, participants described resource constraints as a foundational barrier that shapes what learning opportunities are realistically available and compounds the other challenges documented in this report.

BUDGET ALLOCATIONS AS STATEMENTS OF PRIORITY

Participants consistently emphasized that budgetary decisions reflect deeper systemic priorities. As a senior education department official noted, "Budget allocations are not just numbers. They are statements of priority. You can't talk about quality without funding it. Education gets roughly 2% of GDP. Within that, most goes to salaries. What's left for infrastructure, teacher training, learning materials? Virtually nothing. Then we wonder why reforms fail. You can't build 21st-century schools on 20th-century budgets."

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Pakistan's education spending has consistently remained below 2% of GDP over the past years, well below UNESCO's recommended 15-20% of public expenditure (UNESCO 2015). Respondents noted that this chronic underinvestment forces schools to rely on parental contributions, making education's actual cost significant despite constitutional guarantees of free schooling.

OVERCROWDING AND INFRASTRUCTURE GAPS

Although official statistics suggest manageable student-teacher ratios, classroom realities often reveal a different picture. A teacher from Balochistan explained, "I have 70 students in my classroom from different grades. Half my time goes into managing discipline rather than teaching. There is no way I can give individual attention to any student and with the burden of course completion, I try my best to do what I can."

The study revealed that infrastructure gaps further constrain learning. Persistent electricity shortages, often 10-14 hours during school days in parts of Balochistan and South Punjab render digital learning initiatives largely symbolic. A head teacher shared, "Our school doesn't even have an electricity connection. In the summer, the heat becomes unbearable. How can we use computers or digital tools when we don't even have a fan?"

Even where equipment exists, it is frequently unusable. Participants reported laboratories repurposed as storage rooms and Information and Communications Technology (ICT) equipment locked away or obsolete. One head teacher described the disconnect between training and reality, sharing, "Teachers attend ICT training, but come back to labs with computers running Windows 98. Some don't even turn on. None of the training can be applied."

TEACHERS COMPENSATING FOR INSTITUTIONAL FAILURES

In the absence of institutional support, teachers often compensate using personal resources. One teacher shared, "I bought Vernier calipers and screw gauges with my own money so my students could at least see and touch the instruments before their exams." Others described using personal mobile data to stream videos or demonstrate experiments. While these practices reflect strong individual commitment, they also highlight the system's reliance on informal, unsustainable coping mechanisms rather than structured investment. This pattern—individual commitment operating in the absence of institutional support—was observed consistently across sites.

WEAK INTEGRATION OF DIGITAL AND ENVIRONMENTAL SKILLS

Digital and environmental skills remain weakly embedded in the curriculum due to infrastructure and capacity constraints. Computer Studies typically begins in upper grades and remains largely theoretical due to a lack of resources. Environmental topics, despite Pakistan's acute climate vulnerability, were described as textbook-bound and disconnected from students' lived realities. As one expert noted, "Pakistan is one of the most climate-vulnerable countries, yet our environmental education is completely abstract. Students memorize definitions of 'global warming' and 'greenhouse effect' without understanding how it affects their lives. We don't have resources and capacities to do anything practical."

FRAGMENTED INVESTMENT AND "PROJECTIZED" REFORMS

Respondents described implementation as consistently undermined by fragmented, donor-led initiatives that are often short-term and poorly coordinated. Several participants emphasized the absence of robust data systems to track student competencies over time, limiting the system's ability to learn and course-correct. As one expert observed, reforms remain "projectized rather than institutionalized" and dependent on external funding cycles rather than embedded in sustainable system structures.

RECOMMENDATIONS

The recommendations below are organized around the 4P framework, with each "P" addressing conditions identified in the findings as primary constraints to children learning what matters in Pakistan. Critically, these recommendations consider the importance of access to quality learning opportunities for all children, including the estimated 25 million who are currently out of school. The recommendations function not as sequential steps but mutually reinforcing actions toward education systems transformation. Clarifying the purpose of education provides the foundation for investment in pedagogy; strengthening positioning and coordination among actors helps ensure those investments are coherent; and redistributing power supports reform that is locally owned and sustained by those closest to learning.

1. PURPOSE: CLARIFY THE PURPOSE OF EDUCATION THROUGH PARTICIPATORY MECHANISMS

A recurring theme in the findings is the gap between policy ideals and classroom practice. Pursuing the vision of educational purpose as defined by the SNC or national policy visions requires genuine co-creation among actors in the education ecosystem. Several existing platforms provide entry points. With outreach across 65 districts and more than 1,500 Union Councils, PCE offers an infrastructure for broad-based engagement that

brings together actors across sectors and system levels and provides a potential platform for grassroots vision-building dialogues.

Policy actions:

Build a broadly shared, participatory understanding of what education is for that articulates human development, civic participation, and the cultivation of a breadth of skills as goals of equal standing to workforce preparation, alongside the values already embedded in Pakistan's education tradition.

Expand Local Education Groups, operating in all four provinces under the Global Partnership for Education framework to include teachers, parents, and students in discussions about education's fundamental aims.

Mainstream skills development, including TVET, as an equally valued pathway within the national education system, not a remedial alternative for those who fail academically.

Explicitly address the purpose of education for out-of-school children and their families. A participatory vision of educational purpose must speak to the concerns of those currently outside the system.

The National Education Policy Development Framework, launched in December 2024, created a National Technical Working Group spanning all six provinces and territories (MoFEPT 2024). While designed for policy development, this government-initiated consultative architecture could be leveraged to anchor participatory processes at sub-national levels.

2. PEDAGOGY: REFORM PRE-SERVICE AND IN-SERVICE TEACHER TRAINING AROUND COMPETENCY-BASED, INQUIRY-LED, AND EXPERIENTIAL APPROACHES

The findings suggest that teachers are unlikely to shift their practice without aligned system supports. Pedagogical transformation requires simultaneous investment in capacity, assessment reform, and infrastructure that makes skills-based teaching possible.

Policy actions:

Incorporate competency-based, inquiry-led, and experiential approaches in pre-service and in-service teacher training. Training must be aligned with the demands of the SNC and PESPs. Peer learning platforms, including the WhatsApp teacher networks already functioning informally, should be formalized as recognized spaces for professional dialogue.

Reconfigure assessment systems to reward higher-order learning, reducing negative washback on classroom instruction. This requires building technical capacity within examination boards to design and implement competency-based assessment and investing in formative assessment approaches that give teachers actionable information about student understanding.

Link teacher certification and career progression to classroom performance indicators, including learner engagement, adaptability to new pedagogies, and differentiated instruction, rather than purely to content coverage or examination pass rates.

Invest in the foundational infrastructure that makes skills-based pedagogy possible: reliable electricity, functional laboratories, and updated ICT equipment, particularly in rural and underresourced areas.

PESPs provide concrete entry points for pedagogical reform. An example is Punjab's Education Sector Plan 2019-24 that committed to linking CPD to teacher career progression and focusing on pedagogical skills and formative assessment through the Quaid-e-Azam Academy for Educational Development (Government of Punjab 2020). Sindh's Provincial Institute of Teacher Education is also engaged in revision of the CPD accreditation and certification framework (PITE Sindh 2024). These initiatives demonstrate feasibility but require sustained funding, technical capacity development, and systematic coordination to achieve scale.

3. POSITIONING: ALIGN ALL SYSTEM COMPONENTS BEHIND A COMMON EDUCATIONAL DIRECTION

Among the most consistent patterns documented across the findings is the absence of coherence across actors in the education ecosystem. This fragmentation makes it difficult for the system to pursue any of its stated educational purposes efficiently and effectively.

Policy actions:

Establish formal coordination mechanisms across curriculum reform, teacher training, and assessment, ensuring that when one domain shifts, the others shift with it. This could take the form of an inter-ministerial education coordination body with a clear mandate and accountability structure.

Grant districts and schools real authority over budgeting, staffing, and localized curriculum decisions. Devolution without genuine delegation of authority is decentralization in name only.

Develop coordinated re-enrollment and retention strategies that address the structural barriers keeping 25 million children out of school. These strategies require system-wide coordination across government levels, budget lines, and community structures.

Institutionalize critical reforms through legislation to ensure their continuity across political transitions with cross-party commitment and dedicated budget lines for skills development and teacher training.

Reposition TVET not as a separate stigmatized stream but as an integrated and equally valued component of a coherent national education system. This includes creating structured collaboration between TVET institutions, mainstream secondary schools, academia, and industry for curriculum co-design.

4. POWER: REDISTRIBUTE WHO DEFINES AND SHAPES LEARNING

Creating genuine learning opportunities requires redistributing authority to define what matters in education, not just delivering reformed content from the top.

Involve teachers, parents, students, and communities meaningfully in policy design, curriculum reform, and school governance. School Management Committees (SMCs) exist in all four provinces under provincial education legislation and are mandated to include

parent and community representation in school oversight. However, research consistently finds these structures remain ceremonial rather than functional (Lohana et al. 2016). SMCs should be revitalized as functional governance bodies that give communities real voice in school decisionmaking.

Address the power asymmetry in assessment: teachers are currently held accountable for results but have no influence over how achievement is defined or measured. Teachers and school leaders should have a formal role in assessment design and review processes.

Recognize teachers as co-designers of curriculum and systemic transformation rather than passive recipients of top-down mandates. This requires institutional structures that create space for teacher voice, reward pedagogical innovation, and protect teachers who deviate from rote-oriented routines in pursuit of better learning outcomes.

Involve student voices in school governance, fostering shared accountability and supporting the co-creation of education systems that are responsive to learners' realities and aspirations.

CONCLUSION

This report set out to examine how Pakistan's education system is creating opportunities for children and young people to learn what matters. Based on the accounts of study participants and existing literature across all five themes examined, the findings suggest that opportunities for children and young people—both in and outside of school—to acquire a breadth of skills remain significantly constrained.

The findings point toward what transformation requires, and the 4P framework provides a structure for action. It is essential to align around the purpose of education through participatory dialogue; prioritize experiential teacher training and formative assessments; reposition system actors behind a common educational direction; and redistribute power so that those closest to learning have real voice in defining what education is for.

Pakistan's youthful demographic profile makes this transformation urgent. With one of the world's largest school-age populations, the cost of continued inaction—in human development, economic potential, and civic capacity—compounds with every passing year. Pockets of hope emerge through the commitment visible in the efforts of individual teachers, the growing recognition among parents that marks are not enough, and cases of pedagogical innovation across all provinces. What is required is a system that nurtures these pockets of transformation rather than extinguishes them, and that recognizes that its most fundamental educational obligation is to ensure that all children, regardless of circumstances, have the opportunity to learn what matters.

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ANNEX 1: LIST OF POLICY DOCUMENTS, FRAMEWORKS, AND STRATEGIES REVIEWED

The following documents were reviewed as part of the desk review and policy analysis undertaken for this study.

A. Pakistan: National education policies and frameworks

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ANNEX 1: DISTRIBUTION OF DATA SOURCES

DATA SOURCE/ RESPONDENTS	DESCRIPTION OF CATEGORY	DATA COLLECTION METHOD	NUMBER OF RESPONDENTS	INCLUSION CRITERIA	SITE/ LOCATION
Public school teachers	Teachers currently employed in public sector schools and directly involved in classroom instruction	Focus group discussion (FGD)	5 total (6-8 participants per FGD)	Currently teaching in public schools, representing both rural and urban schools	Islamabad Capital Territory (ICT) and four provinces
Education policymaker/ education department official	Senior officials involved in education policy formulation/ planning/ implementation at the federal or provincial levels	Key informant interview (KII)	5	Senior level position with direct responsibility for education policy or administration	One in each province and the ICT
Curriculum expert	Specialist with technical expertise in curriculum development, review, and alignment within t he formal education system	KII	1	Recognized professional experience in curriculum development at the national level	ICT
Assessment expert	Specialist with expertise in student assessment systems, examination design, or learning evaluation	KII	1	Recognized professional experience in education assessment and evaluation at the national level	ICT
District administrator/ head teacher per region	Education administrators responsible for district-level management, where district administrators were unavailable, head teachers were included	KII	5	District-level administrative role or school leadership position with system-level insights	Selected districts across provinces and the ICT
Parents	Parents of school-going children residing in rural areas, providing perspectives on education relevance	Semi-structured interviews	5	Residence in a rural area and having at least one child enrolled in school	Rural areas from provinces and the ICT
Industry/ private sector representative	Representative from the private sector with experience in workforce development	KII	1	Professional role related to industry hiring or skills	ICT

HR representative	HR professional involved in recruitment, training, and workforce planning	KII	1	Experience in recruitment and human resource management	ICT
Academia/ university representative	Academic professional engaged in education research	KII	1	Expertise in education and skill development	Sindh
NGOs/ civil society representatives/ education experts	Representatives from civil society organizations working on education, youth development, or skills-related initiatives	Semi-structured interviews	2	Active involvement in education or skills-focused civil society initiatives	ICT and Punjab
TVET center representatives	Representatives of public and private skill development centers involved in program delivery or management	Semi-structured interviews	2	Affiliation with operational skill development centers	Sindh and Balochistan
TVET centers (case sites)	Public and private TVET centers selected as case sites for field observation	Non-participant observation and informal interviews	2 (case sites)	Operational centers: one public and one private-run center selected for comparison	Sindh and Balochistan


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