Federal Directorate of Education
Ministry of Federal Education and Professional Training

From Access to Excellence: FDE Roadmap for Quality Education and Innovation

December 2025



Executive Summary

The Federal Directorate of Education (FDE), under the Ministry of Federal Education and Professional Training (MoFEPT), has launched the Quality Education Roadmap, a strategic framework designed to transform Islamabad Capital Territory (ICT) schools from "high access" to "high achievement." While Islamabad leads Pakistan with a District Education Performance Index (DEPIx) score of 73.86, a critical learning crisis persists. Data shows that 9.4 years of schooling in ICT translate into only 5.1 effective learning years. Furthermore, 2023 National Achievement Test (NAT) results indicate that Grade 4 students score as low as 39% in Mathematics and 43% in English.

This Roadmap acts as a strategic imperative to transition from fragmented initiatives to a coherent, outcome-based framework. Leveraging the FDE's centralized governance of 432 institutions and 243,000 students, it implements mandatory reforms to bridge gaps in teaching quality and foundational learning through five strategic pillars:

Policy Review & Governance: Strengthening leadership by filling 80% of sanctioned posts by 2027 and establishing a Policy & Planning Cell for data-driven oversight.

Attainment of Student Learning Outcomes (SLOs): Aligning curriculum and assessments with 21st-century skills, including digital literacy and climate change, to ensure holistic student development.

Enabling Environment & Resource Equity: Eliminating infrastructure gaps by transitioning from rented buildings to purpose-built campuses and targeting a 30:1 student-teacher ratio in primary schools by 2030.

Professional Development Framework: Replacing episodic training with a Continuous Professional Development (CPD) model. The goal is for 80% of teachers to achieve digital competency certification by 2027, linking growth to performance incentives.

Digital & Innovative Learning: Integrating EdTech tools, such as smart classrooms and gamified STEM content, to ensure educational continuity and modern engagement.

Implementation Strategy The roadmap follows a three-phased approach: Quick Wins (2026–2027) focuses on leadership and capacity building; Scale-Up (2028–2030) prioritizes infrastructure and universal digital access; and Consolidation (Post-2030) embeds these reforms permanently.

By aligning with Sustainable Development Goal 4 (SDG 4), the FDE aims to position the ICT education system as a national "Lighthouse System"—a replicable model of excellence proving that centralized governance can deliver world-class learning outcomes for every child.

ACKNOWLEDGEMENTS

The development of the **Quality Education and Innovation Roadmap** is the result of extensive collaboration, strategic vision, and an unwavering commitment to the future of the **Federal Directorate of Education (FDE)**. This document stands as a testament to the collective efforts of a dedicated team of professionals who have worked tirelessly to transition our educational system toward a model of world-class excellence.

We wish to express our profound gratitude to the **Working Group**, which brought together the combined expertise of **officials from the FDE** and the **Project Coordination Unit (PCU) team**. The TWG's work has laid a strong foundation for improving instructional practices, strengthening monitoring and governance mechanisms, and embedding innovation across FDE institutions. Their collective effort has produced a roadmap that will guide reform, support educators, and ultimately improve learning outcomes for students

A special note of appreciation is extended to **Riffat Jabeen**, whose invaluable insights and leadership provided the necessary direction to align our goals with modern educational standards. Her commitment played a pivotal role in ensuring the quality and coherence of this document. We also acknowledge the collaborative spirit of the entire technical team, whose administrative support helped transform complex data into an actionable plan to empower our educators and school leaders.

Message from the Minister of Federal Education & Professional Training



Education is the key to Pakistan's future, and this roadmap is our pledge to unlock that future for every child. For too long, access alone has defined our progress. Now, we must ensure that access leads to achievement. This roadmap is not merely a document it is a national commitment to transform our schools from systems of access into systems of achievement.

Pakistan has faced a persistent learning crisis where years of schooling have not translated into meaningful knowledge or skills. In Islamabad, despite high enrolment and strong governance, the reality remains that too many of our children struggle with foundational literacy and numeracy. This roadmap is our collective response to that challenge, ensuring that every child receives not just schooling, but quality education that prepares them to thrive in the modern world.

By prioritizing **foundational learning, teacher empowerment, digital innovation, and equity of resources**, we are laying the foundation for a future where every child regardless of background has the opportunity to thrive. Our vision is clear: to establish Islamabad's education system as a *National Lighthouse*, a model of excellence that demonstrates how disciplined reform, evidence-based planning, and centralized governance can deliver world-class outcomes.

This journey will not be easy, but it is essential. The roadmap provides us with a phased strategy quick win to build momentum, scale-up to expand access and infrastructure, and consolidation to embed reforms permanently. Together, these steps will ensure that our schools prepare students not only for examinations, but for life in a rapidly changing world.

Education is the most powerful investment we can make in our nation's future. With this roadmap, we reaffirm our pledge to eliminate learning poverty, empower our teachers, and equip our students with the skills, values, and resilience they need to lead Pakistan into a brighter tomorrow.

Dr. Khalid Maqbool Siddiqui
Minister of Federal Education & Professional Training

Message from the Secretary, Ministry of Federal Education & Professional Training



The Quality Education and Innovation Roadmap is not simply an aspiration it is a management tool designed to deliver measurable results. Our challenge is clear: while Islamabad has achieved high enrolment and governance stability, the learning outcomes of our students remain far below expectations. Years of schooling must translate into real knowledge, skills, and competencies.

This roadmap provides us with a disciplined framework to move from fragmented initiatives to a unified system of accountability. It sets out specific targets improving foundational literacy and numeracy, strengthening teacher capacity, and ensuring equity in resources that will be tracked and measured at every stage.

Our responsibility is to ensure that every rupee invested in education produces visible impact in the classroom. By embedding data-driven governance, professional development, and digital innovation into the system, we will create schools that are not only accessible but effective.

The Federal Directorate of Education has the advantage of centralized authority. With this roadmap, we will use that authority to standardize reforms, enforce accountability, and build a system that can serve as a National Lighthouse for the rest of Pakistan.

This is a call to action for all stakeholders, teachers, administrators, parents, and policymakers. Together, we must ensure that every child in Islamabad receives not just schooling, but quality education that prepares them for the future.

Nadeem Mehboob
Secretary, Ministry of Federal Education & Professional Training

Message from the Director General, Syed Junaid Ikhlaq, Federal Directorate of Education

Message from the Director General, Federal Directorate of Education



The *Quality Education and Innovation Roadmap* is about turning vision into practice. For us at the Federal Directorate of Education, this means moving beyond policy statements to concrete action inside classrooms.

Our focus is on empowering teachers as the true agents of change. With continuous professional development, modern teaching tools, and performance-linked growth, we are equipping them to inspire confidence and creativity in every student. At the same time, we are ensuring that schools provide environments where children feel safe, supported, and motivated to learn.

This roadmap also places students at the center of reform. It is designed to give them not only strong foundations in literacy and numeracy, but also the digital fluency, problem-solving skills, and resilience needed to thrive in a rapidly changing world.

The strength of the FDE lies in its ability to act decisively and consistently across all institutions. By implementing this roadmap step by step, we will transform everyday teaching and learning into experiences that prepare our children for success far beyond the classroom.

Syed Junaid Ikhlaq
Director General, Federal Directorate of Education

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List of Acronyms

Acronyms	Full Form
AEO	Area Education Office
ASER	Annual Status of Education Report
BECS	Basic Education Community Schools
CERC	Credit Equivalence Review Committee
CERP	Centre for Economic Research in Pakistan
CH	Credit hours
CPD	Continuous Professional Development
DEPI	District Education Performance Index
DSF	Demographic Survey Framework
EMIS	Education Management Information System
FCE	Federal College of Education
FDE	Federal Directorate of Education
FFLP	Federal Foundational Learning Policy
FLN	Foundational Literacy and Numeracy
GEPD	Global Education Policy Dashboard
HR	Human Resources
HOI	Head of Institution
ICT	Islamabad Capital Territory
IEA	International Association for the Evaluation of Educational Achievement
KPI	Key Performance Indicator
LaNA	Literacy and Numeracy Assessment
LAYS	Learning-Adjusted Years of Schooling
LMS	Learning Management System
M&E	Monitoring and Evaluation
M/o FE&PT	Ministry of Federal Education and Professional Training
MoU	Memorandum of Understanding
NAT	National Achievement Test
NAW	National Assessment Wing
NEMIS	National Education Management Information System
NEP	National Education Policy
NEPDF	National Education Policy Development Framework
NIETE	National Institute for Excellence in Teacher Education
OOSC	Out-of-School Children
PD	Professional Development
PES	Pakistan Education Statistics
PFL Hub	Pakistan Foundational Learning Hub
PIE	Pakistan Institute of Education
PIRLS	Progress in International Reading Literacy Study
PISA	Programme for International Student Assessment
RRREP	Response, Recovery and Resilience Education Project
SDG 4	Sustainable Development Goal 4 (Quality Education)
SEL	Social-Emotional Learning
SLO	Student Learning Outcome
SMC	School Management Committee
T-LMS	Training Learning Management System

TIMSS	Trends in International Mathematics and Science Study
TIP	Targeted Instruction Program
T-PD	Teacher Professional Development
TVET	Technical and Vocational Education and Training (Contextual reference)
VP	Vice Principal

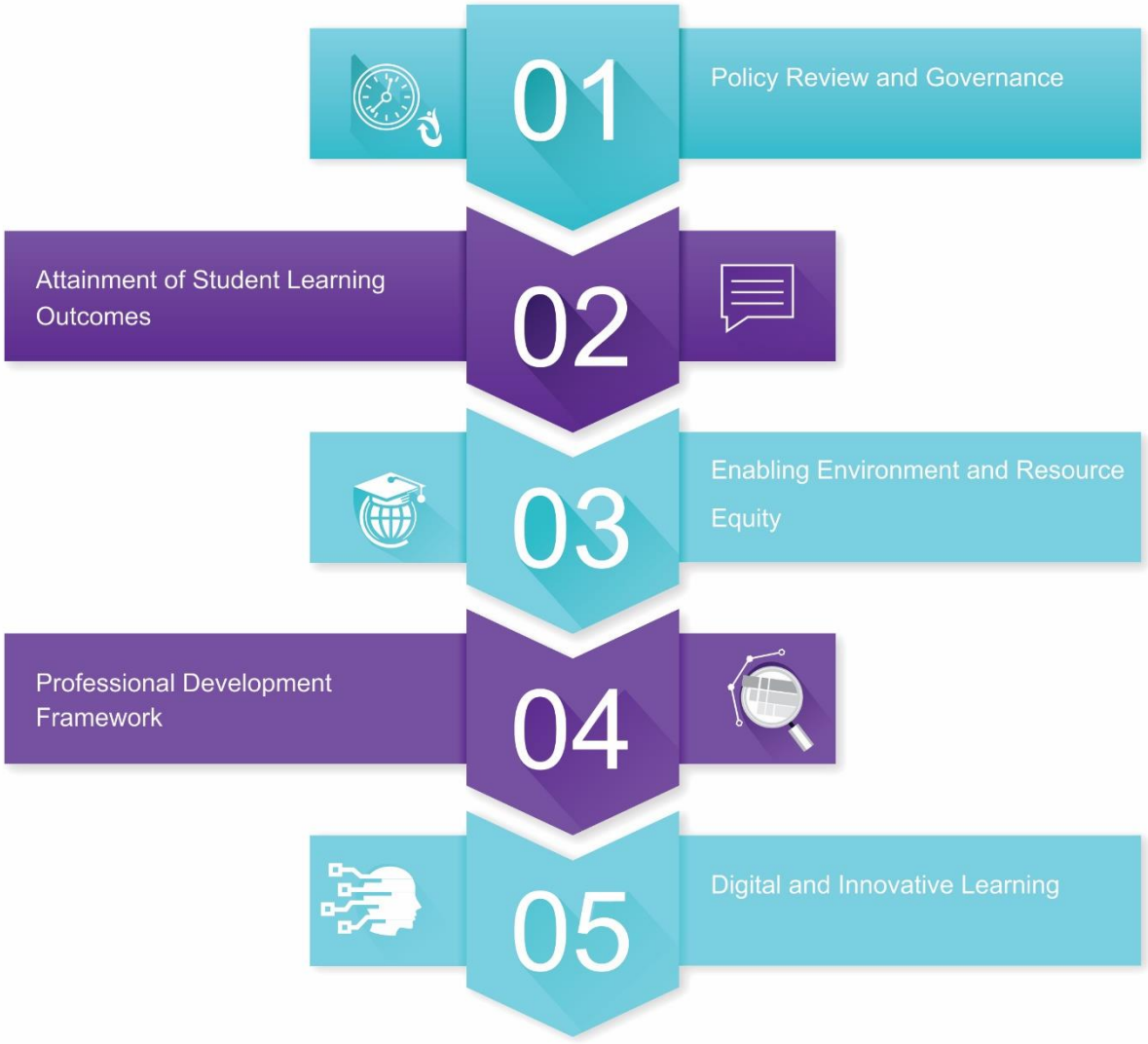
FROM ACCESS TO EXCELLENCE:

FDE ROADMAP FOR QUALITY EDUCATION AND INNOVATION

This document establishes the critical need for a structured Quality Education Roadmap for schools under the Federal Directorate of Education (FDE) in the Islamabad Capital Territory (ICT). The FDE system currently operates within the severe context of a national education crisis, marked by widespread learning poverty and a critical rate of out-of-school children (OOSC).

Despite the FDE's unique centralized governance structure, which provides a powerful mechanism for system-wide reform, governance control over crucial systemic inputs, including the planning of new educational schemes, financial management, and the HR management of employees, covering in-service training and capacity building, student learning outcomes remain a primary challenge. The rationale for the roadmap is to transition from fragmented initiatives to a coherent, outcome-based, and accountable framework, focusing all resources on measurable improvements in the quality of teaching and foundational learning. The proposed roadmap is built on five interconnected pillars to ensure systemic, sustainable reform.

FIVE PILLARS OF FDE
ROADMAP FOR QUALITY EDUCATION AND INNOVATION



A. Baseline Situation Analysis

Pakistan's education system demonstrates strong governance, particularly in the Islamabad Capital Territory (ICT), but persistent challenges remain in foundational learning, instructional quality, and digital integration. Multiple assessments including DEPIx, ASER, NAT, LaNA, GEPD, PES, and specialized studies consistently highlight gaps in student achievement, teacher proficiency, and curriculum alignment.

The District Education Performance Index (DEPI) places ICT at the top nationally with a composite score of 73.86, yet weaknesses in learning and public financing reveal that strong inputs are not translating into optimal outcomes. The Targeted Instruction Program (TIP) in Mathematics showed how rapid gains are possible: remediation needs dropped significantly across Classes I–V after 40 days of structured teaching.

Annual Status of Education Report (ASER) 2023 confirms ICT public schools outperform national averages but lag behind ICT private schools, pointing to a ceiling in foundational skills. Learning-Adjusted Years of School (LAYS) data reveals that 9.4 years of schooling translate into only 5.1 effective learning years, underscoring the depth of the learning crisis. Global Education Policy Dashboard (GEPD) findings emphasize weak teacher content knowledge, with only 7.1% of urban and 1.7% of rural teachers proficient in the subjects.

National Achievement Test (NAT) 2023 and Literacy and Numeracy Assessment (LaNA) 2023 further expose regional disparities and international learning gaps, with Pakistan's scores below global benchmarks. Pakistan Education Statistics (PES) 2024 confirms ICT's strengths in access and governance but identifies teacher quality as a critical weakness. Foundational Learning Landscape and Digital Content Assessments highlight reliance on rote pedagogy, weak assessment practices, and limited digital integration. Collectively, these findings establish the urgent need for reforms that move ICT from high access to verifiable excellence in student achievement.

B. Leveraging Strengths to Drive Reform

Despite Islamabad Capital Territory's strong standing in national benchmarks, the education system faces persistent weaknesses that undermine quality. The challenges contribute to high levels of learning poverty, uneven student outcomes, and limited equity and inclusion. Without urgent reforms, structural strengths will continue to be offset by deficits in instructional quality, curriculum alignment, and governance autonomy.

Table 1. Challenges & Implications

No.	Challenge with Evidence	Implication for Quality
1	**Learning Crisis (Low SLOs)** NAT 2023 shows FDE Grade 4 students scoring only 39% in Maths, 43% in English, and 59% in Urdu well below expected levels.	Foundational learning gaps drive national learning poverty, with 77% of 10-year-olds unable to read an appropriate text.
2	**Overcrowded Classes** Average class size in FDE schools is 41 students compared to 19 in private schools.	Overcrowding undermines pedagogy, classroom management, and individualized attention.
3	**Substandard Infrastructure** Research highlights cramped classrooms, poor lighting, weak thermal comfort, and missing essential facilities.	Physical environment hinders concentration, teacher morale, and student health/safety.

4	**Weak Teacher Professional Development** Studies show fragmented CPD and poor subject mastery among teachers.	Teachers lack skills to manage diverse classrooms and deliver curriculum effectively.
5	**Student Retention Issues** PIE documentation shows 86% of teachers rate retention probability as "medium," 14% as "low."	Weak engagement fuels dropouts, reinforcing the Out-of-School Children (OOSC) challenge.
6	**Underutilized Technology** Smart classrooms, Chromebooks, and LMS remain underused due to poor training, weak connectivity, and partial curriculum alignment.	Digital integration is low, limiting innovation and equitable access.
7	**Equity & Inclusion** Only 29% of schools have ramps and 11% provide special aids.	Infrastructure is partially inclusive, but pedagogy fails to support diverse learners.

At the same time, the Federal Directorate of Education (FDE) possesses unique advantages that position it to lead systemic reform. Its centralized governance model provides direct control over 432 institutions and 243,000 students, enabling swift and mandatory policy implementation. ICT's top ranking in the District Education Performance Index (DEPIx) gives FDE political and moral authority as a national "Lighthouse System." Pockets of competitiveness in foundational learning, along with close proximity to federal policy leadership, further strengthen its capacity to secure funding, streamline approvals, and scale best practices.

Table: 2 System Strengths

Strength (with Evidence)	**Strategic Advantage for Roadmap**
Centralized Governance & Unified Command FDE directly controls 432 institutes and HR for 243,000 students.	Enables swift, mandatory policy implementation (e.g., Foundational Learning Policy, teacher training) without inter-provincial delays.
Top Performance in DEPIx ICT ranked 1st among 134 districts, scoring 73.86 overall and 68.95 in Learning (vs. national 47.52).	Positions FDE as a national "Lighthouse System," securing donor confidence, political buy-in, and financial allocations.
Foundational Learning Competitiveness NAT 2023 shows FDE schools slightly outperform private schools in Urdu/Math at Grade 4; rural schools outperform urban.	Provides a baseline of quality; reforms can scale best practices from high-performing schools across the system.
Proximity to Policy Leadership FDE operates directly under M/o FE&PT in ICT.	Ensures rapid policy design, prioritized funding, streamlined approvals, and accountability across institutions.

Taken together, these challenges and strengths define both urgency and the opportunity for reform. They establish the rationale for the Access to Excellence Roadmap, which leverages FDE's structural advantages to directly confront systemic weaknesses and transform ICT into a model of educational excellence for Pakistan.

C. Rationale for the Quality Education Roadmap

The evidence from multiple national and international assessments confirms that while Islamabad Capital Territory (ICT) has secured high levels of access, infrastructure, and governance stability, the defining challenge now lies in the quality of learning. Persistent weaknesses in foundational literacy and numeracy, teacher capacity, curriculum alignment, and digital integration continue to limit student achievement and contribute to widespread learning poverty. These deficits highlight the urgent need for a coherent, outcome-based strategy that moves beyond fragmented initiatives and ensures measurable improvements in teaching and learning.

Based on the detailed data analysis above, the rationale for a comprehensive Quality Education Roadmap for the FDE system is not simply to maintain existing standards, but to execute a targeted, evidence-based transformation that addresses the systemic gap between access (enrollment) and quality (learning outcomes). The development of this roadmap is not an option but a strategic imperative, driven by the following factors:

1. **Addressing the Core Crisis:** The urgent need to improve poor student learning outcomes and reduce the high number of out-of-school children requires a roadmap that defines clear, measurable targets for quality improvement.
2. **Leveraging Centralization for Reform:** FDE's unique centralized governance structure offers an unparalleled opportunity to implement reforms uniformly, equitably, efficiently, and at scale. A roadmap ensures these efforts remain focused and coherent.
3. **Maximizing Resource Efficiency:** With Pakistan allocating less than 2% of GDP to education, the roadmap provides a transparent, objective basis for prioritizing high-impact interventions. It ensures that capital investments, such as infrastructure upgrades, directly support pedagogical reforms rather than existing as standalone projects.
4. **Creating a National Model:** Successfully transforming the FDE system can establish a replicable, high-quality model for other federating units, aligning with the vision of a cohesive and transformative national education system.
5. **Establishing Accountability:** As a living document, the roadmap defines desired outcomes and ensures that all initiatives contribute directly to those outcomes, embedding system-wide accountability for results.

Taken together, these challenges and strengths define both the urgency and the opportunity for reform. The Quality Education Roadmap leverages FDE's structural advantages to directly confront systemic weaknesses, accelerate learning recovery, and position ICT as a national model of educational excellence.

D. Ongoing Quality Enhancement Initiatives in ICT Education

The Federal Directorate of Education (FDE), under the guidance of the Ministry of Federal Education and Professional Training (M/o FE&PT), is already pursuing a range of initiatives to enhance educational quality across Islamabad schools and colleges. These efforts span foundational learning, curriculum reform, infrastructure upgrades, skill and career readiness, and out-of-school children (OOSC) enrollment. While each program addresses critical aspects of the education system, challenges remain in teacher capacity, resource allocation, monitoring, and equitable implementation. The following consolidated table provides a snapshot of ongoing quality enhancement initiatives, highlighting their objectives, current challenges, and the strategic opportunities they create for integration into the Quality Education Roadmap.

Table: Ongoing Quality Enhancement Initiatives

Sector/Level	Initiative/ Program	Objective	Challenges/ Areas for Improvement	Strategic Opportunity for Roadmap
Primary (Grades 1–5)	Federal Foundational Learning Policy (FFLP) & Reading Hour	Strengthen foundational literacy (English, Urdu) and numeracy through daily structured sessions and differentiated instruction	Inconsistent teacher training, lack of high-quality supplementary materials, weak monitoring and evaluation systems	Establish a national model for foundational learning; scale structured remediation across all FDE schools
Primary (Grades 1–5)	Scaling Up FLN Efforts (CPD, resources, assessments, rural focus)	Build teacher capacity, provide structured lesson plans, track progress, and prioritize underserved rural schools	Limited technical expertise in support teams, high student-teacher ratios, uneven rural implementation	Institutionalize continuous professional development and embed assessment-driven instruction system-wide
Primary–Secondary	Curriculum & Textbook Reform (Grades 1–5 rollout, National Curriculum Framework, Minimum Standards update)	Align content with National Curriculum, foster 21st-century skills, integrate digital lesson plans via LMS	Effective rollout, teacher readiness to use interactive/digital content, ensuring digital equity	Use ICT as a pilot for curriculum modernization and digital integration, creating replicable models
Secondary & Colleges	Skill & Career Readiness Reforms	Prepare students for higher education and careers through communication skills, exam coaching, coding, foreign languages, entrepreneurship	Resource gaps, need for specialized faculty, consistent implementation across 432 institutions	Position ICT as a hub for career readiness and modern skills, linking education to employability
Access/ Infrastructure	OOSC Enrollment & Infrastructure Upgradation	Enroll out-of-school children via evening shifts; upgrade classrooms, labs, libraries, and facilities (esp. rural schools)	High student-teacher ratios (33% teachers manage 51+ students), overlapping workloads, financial constraints	Demonstrate scalable solutions for OOSC enrollment and rural infrastructure, aligning with SDG 4 targets

E. Action Plan

The Federal Directorate of Education (FDE), Islamabad, has formally commenced a transformative journey to strategically elevate the quality of education across its institutions. This system-wide reform is a direct and necessary response to the evidence-based challenges and systemic shortcomings meticulously identified by the comprehensive baseline analysis, thereby establishing a new, rigorous standard for educational excellence within the Islamabad Capital Territory. This Quality Learning Roadmap (Annex) serves as a strategic framework to guide reforms, align interventions with national priorities, and ensure measurable progress toward Sustainable Development Goal 4 (SDG 4).

Education systems worldwide are undergoing rapid change, driven by digital innovation, evolving labor market demands, and the imperative of equity and inclusion. Pakistan's federal education system must respond with agility, foresight, and evidence-based planning. The roadmap presented here is not merely a set of targets; it is a comprehensive plan to institutionalize quality, strengthen governance, and create enabling environments where every child can thrive.

1. Road Map

The roadmap is organized around five interlinked pillars, directly targeting the identified data-backed challenges.



i. Policy Review and Governance

Strong leadership and governance are critical to sustaining reforms. The roadmap identifies gaps in school and college leadership posts, policy review mechanisms, and monitoring systems. By 2027, the goal is to fill 80% of sanctioned leadership positions, review governance frameworks, and institutionalize annual training schedules.

Implementing large-scale reforms under Pillars 1 and 2 requires the Federal Directorate of Education (FDE) to leverage its centralized strength for system-wide alignment. Robust data tools such as the DEPIx must guide policy decisions, resource allocation, and performance evaluations, ensure accountability and address weak practices.

Strategic actions include:

- Establishing a Policy & Planning Cell to conduct annual reviews and align policies with National Education Policies (NEP) and SDG 4.
- Developing a robust Monitoring & Evaluation (M&E) framework linked to Education Management Information System (EMIS) for real- time data.

- Institutionalizing leadership training modules in change management and adaptive planning.
- Ensuring foundational learning principles are integrated across all policy documents and curricula.

This pillar ensures that reforms are not ad hoc but embedded in a cycle of continuous improvement.

ii. Attainment of Student Learning Outcomes

Ultimately, the success of reforms will be measured by student learning. Context analysis, drawing on national and international studies, highlights significant learning deficits and, in some areas, indicators of learning poverty within the FDE system. The fundamental objective of all reform efforts is therefore the measurable and accelerated improvement of student learning outcomes across the board.

The roadmap prioritizes revising the Scheme of Studies to foster holistic development—cognitive, social-emotional, ethical, and vocational—supported by complementary interventions. Life Skills Education is positioned as a cornerstone of this approach, integrating 21st-century skills to prepare learners for future challenges. While initial implementation has begun, progress remains uneven, particularly across cross-cutting themes such as social-emotional learning (SEL), climate change, Entrepreneurship, Character Education, Coding and AI . The framework provides dual benefits: compulsory life skills from Class 6 onward, and optional technical specialization beginning at the Middle Tech level and culminating in Inter-Tech, enabling pathways to B.S. Engineering and related technical disciplines (e.g., Mechanical, Civil, Electrical).

This skills-based approach bridges curriculum content with future-readiness, equipping learners with competencies essential for national development. Addressing student retention challenges currently at a 14% low probability and ensuring equity requires systemic focus on the most vulnerable. Governance reforms must prioritize inclusive practices, effective resource deployment to reduce rural-urban disparities, and mechanisms to integrate more than 50,000 out-of-school children, ensuring all learners can reach their full potential.

Key directions include:

- Aligning textbooks and instruction with national standards.
- Embedding 21st-century skills such as critical thinking, creativity, collaboration, and communication.
- Integrating cross-cutting themes: SEL, climate change, Entrepreneurship, Character Education, Coding and AI etc.
- Training teachers on revised schemes and conducting external assessments to identify gaps.
- Ensuring instructional methods and assessments are aligned with curriculum standards and benchmarks.

By 2030, the aim is full alignment of curriculum, instruction, and assessment, ensuring that students graduate as skilled, resilient, and responsible citizens.

iii. Enabling Environment and Resource Equity

Equity in resources and infrastructure is fundamental to delivering quality education. The roadmap calls for comprehensive audits of facilities, rationalization of staff, and stronger school management systems.

Research highlights the damaging effects of overcrowded classrooms and substandard infrastructure poor acoustics, inadequate lighting, and cramped spaces where quality instruction becomes nearly impossible.

This pillar mandates a phased, pedagogically driven infrastructure plan that prioritizes functional, safe, and inclusive facilities. Immediate focus must be on addressing overcrowding, ensuring clean water, and providing adequate sanitation. Only once these essentials are secured should attention shift to cosmetic upgrades, ensuring that every improvement directly supports effective teaching and learning.

Targets include:

- By 2027, all institutions to undergo audits. 70% of high-priority gaps (e.g., safe drinking water, boundary walls, functional washrooms) to be addressed by 2028, with full resolution by 2030.
- Achieving national student–teacher and section teacher ratio standards (1:25 student-teacher and 1:2 section-teacher ratio at primary level and 30:1 student-teacher and 1:2 section-teacher in secondary) through rationalization and recruitment.
- Transitioning schools running in rented residential buildings to purpose-built educational facilities, ensuring teaching/learning and ICT facilities readiness.
- Institutionalizing School Management Committees (SMCs) with operational bank accounts, standardized documentation, and digital tracking.
- Expanding hygiene initiatives, and access to health services to improve student well-being and retention.

This pillar emphasizes holistic support; physical, administrative, and social, to create schools that are safe, inclusive, and future-ready institutions.

iv. Professional Development Framework

Teacher and administrator capacity is the backbone of education reform. Equipping schools with technology, updated curricula, and strong administrative policies will not improve learning outcomes unless educators have the skills to use them effectively. Professional development is therefore positioned as the central driver of sustainable change.

In 2024, significant gaps remain: teacher digital competency is limited, training is sporadic, and leadership modules are not institutionalized, leaving uneven capacity across institutions. These weaknesses have hindered effective technology integration, curriculum adaptation, and confident leadership.

By 2027, the roadmap targets optimal number of teachers and IT staff achieving digital competency certification, and heads of institutions, vice principals, and assistant headmistresses trained in leadership and planning. These milestones will create a critical mass of digitally literate educators and visionary school leaders.

By 2030, continuous professional development will be fully institutionalized across all cadres, with maximum numbers of teachers and administrators engaged in structured cycles of refresher courses, peer learning, mentoring, and specialized tracks in STEM, languages, social-emotional learning, and climate education. CPD will be embedded in career progression and linked to performance incentives, ensuring sustainability.

Ultimately, professional development is the cornerstone of quality reform, preparing educators for current challenges and empowering them to adapt to future demands. By investing in human capacity, the roadmap ensures that digital innovation, governance reforms, and infrastructure upgrades translate into meaningful improvements in student learning outcomes.

Analysis highlights inadequate teacher training and subject mastery, particularly in classrooms averaging 41 students. The current fragmented training model must be replaced with a sustained, system-wide CPD approach focused on effective large-class pedagogy, diagnostic assessment, and subject-specific content mastery.

v. Digital and Innovative Learning

The roadmap recognizes that technological integration is central to modern education. At present, nearly half of all teachers actively use digital tools, yet formal training remains limited. Technology is a powerful facilitator of learning and will increasingly shape the educational experience of today's students. However, its effectiveness depends on alignment with sound learning theories and neuroscience. A cautious, deliberate approach with realistic expectations is therefore essential.

Without skilled education professionals who can adapt tools to the needs of children in their specific contexts, technology risks being counterproductive. Most of the solutions are unsuitable, particularly in the early years. To address low learning outcomes and ensure consistent professional development across a large, centralized system, technology must be strategically leveraged. Digital platforms can provide personalized remediation for students struggling with foundational concepts and deliver scalable, high-quality, continuous teacher professional development, overcoming both geographical and logistical barriers.

Targets include:

By 2027, the goal is for 80% of teachers to embed EdTech tools into lesson planning, rising to 100% integration by 2030. By 2030, all teachers teaching in FDE schools will be trained to effectively and productively use the technological tools for teaching/learning process. Key interventions include:

- Provision of smart classrooms, interactive boards, and connected platforms.
- Tiered training programs for teachers and IT staff, with certification benchmarks.
- Development or acquisition of gamified and simulation-based content, focusing on STEM, to enhance learners' engagement.
- Hybrid access models to ensure continuity of learning during disruptions.

This digital transformation will be supported by infrastructure upgrades, partnerships with telecom providers, and continuous monitoring of tool effectiveness.

Components:

- Tiered Training Programs: Basic, intermediate, and advanced modules for digital literacy, pedagogy, and leadership.
- Continuous Professional Development: Institutionalized cycles of refresher courses, peer learning, and mentoring.
- Specialized Tracks: Subject-specific training (STEM, language, SEL, climate education) and technical training for IT staff.
- Leadership Development: Adaptive planning, change management, and governance training for administrators.

- Recognition & Incentives: Certification, awards, and career progression linked to CPD participation and performance.
- Monitoring & Evaluation: Integration of CPD records into EMIS, with dashboards tracking participation, certification, and impact on classroom practice.

This framework ensures that professional growth is not episodic but embedded in the culture of FDE.

Timeline and Milestones

The implementation of the Quality Learning Roadmap is envisioned as a phased process, ensuring that reforms are introduced systematically, scaled up effectively, and consolidated for long-term sustainability. The three distinct phases - short- term (2026–2027), medium-term (2028–2030), and Consolidation (Post-2030) provide a clear trajectory for achieving digital equity, governance reforms, infrastructure upgrades, and holistic student learning outcomes.

Phase I: Quick Wins (2026–2027)

The first phase focuses on immediate priorities and foundational reforms with a specific emphasis on integrating Matric-Tech and Inter-Tech into the mainstream academic structure. During this period, teacher training programs will be rolled out to build digital and pedagogical capacity, ensuring that educators are prepared to integrate technology into classrooms. Governance audits will be conducted to rationalize leadership structures and fill vacant posts, while digitization roadmap implementation process will be initiated.

Curriculum reforms will begin with the revision and implementation of the scheme of studies, ensuring alignment with national standards and the integration of 21st-century skills and vocational skills. A sufficient number of academic coordinators, including subject specialists in tech-driven fields will be placed in Area Education Offices (AEOs) to strengthen classroom monitoring and instructional quality. Textbook quality assurance processes will be initiated to guarantee consistency and relevance, while rationalization exercises will address student–teacher ratio imbalances. By the end of this phase, FDE aims to achieve visible improvements in instructional quality, governance efficiency, and digital and technical readiness across all institutions

Phase II: Scale-Up (2028–2030)

The second phase builds on the foundations laid earlier and emphasizes expansion specifically bridging the gap between school-level reforms and higher education requirements. Infrastructure upgrades will be prioritized, including the establishment of ICT labs in all schools and the transition of rented facilities to purpose-built campuses. Comprehensive audits of infrastructure and staffing will be completed, ensuring that gaps are identified and addressed.

Curriculum and scheme of studies will undergo further review and reforms to ensure students are prepared for higher education entrance exams and university-level academic rigor. Governance frameworks will be formally approved, and at least 100% of leadership posts filled, institutionalizing accountability and adaptive planning. Rationalization will be supported through dashboards and digitized HR systems, enabling equitable deployment of teachers across schools.

Student assessment systems will be strengthened through comprehensive evaluations, including exam result analysis and targeted programs for improvement. By 2030, FDE aims to achieve 100% compliance with student–teacher ratio standards, full instructional alignment with curriculum benchmarks, and universal access to digital learning resources.

Phase III: Consolidation (post-2030)

The final phase focuses on embedding reforms into the system for long-term sustainability. Universal digital equity will be achieved, with all classrooms equipped with smart technologies and reliable connectivity, and 100% of teachers possessing certified digital competency. Purpose-built campuses will replace rented facilities, ensuring that every school operates in a safe, well-resourced environment.

Policy alignment will be fully institutionalized, with leadership structures reviewed annually and governance frameworks embedded in practice. Assistant teachers will be appointed at the primary level to reduce classroom overcrowding and support individualized learning. Early Childhood Education (ECE) will be expanded to 100% of primary schools with primary classes in all catchment areas, ensuring that foundational learning is strengthened from the earliest grades.

This consolidation phase ensures that reforms are not temporary interventions but permanent features of the education system. By embedding digital equity, governance accountability, and holistic learning outcomes, FDE will create a resilient education system capable of adapting to future challenges.

Conclusion

The Quality Roadmap acknowledges current baselines, sets measurable targets for 2027 and 2030, and provides clear strategies for achievement. Its strength lies in its integration: digital innovation is tied to teacher training, governance reforms are linked to accountability, and infrastructure upgrades are aligned with equity goals.

By 2030 and beyond, the roadmap envisions a federal education system that is digitally empowered, professionally led, and aligned with national and global priorities. The milestones outlined in this framework provide not only a plan of action but also a vision of what quality education in Pakistan can and should look like.

This roadmap is not a static document but a living framework. Its success will depend on sustained commitment from FDE leadership, collaboration with ministries and partners, and continuous monitoring to adapt to emerging challenges. If implemented with rigor and vision, it will transform the federal education system into one that is inclusive, innovative, and aligned with the aspirations of Pakistan’s youth.

FDE's ROADMAP FOR QUALITY EDUCATION AND INNOVATION

FEDERAL DIRECTORATE OF EDUCATION (FDE) ISLAMABAD

Annexure

PILLAR-I Policy Review and Governance					
Intervention	**Baseline**	**Actions**	**Outcomes**	**Target 2026-2027**	**Target 2028- 2030**
Leadership and Governance	1. School Leadership Standards developed but are not yet notified. 2. Transfer and posting policy is developed but requires automation. 3. A School Management Manual with well-defined key Performance Indicators (KPIs) for HOIs is developed and notified though its implementation and monitoring remain unstructured. KPIs given no weightage in the Personal Evaluation Report (PER), resulting in limited accountability and diminished impact. 4. Absence of defined promotion/ placement criteria for Heads of Institutions (HOIs). 5. Lack of structured capacity-building programs for novice HOIs. 6. All HOIs received training in instructional leadership; however, follow-up and monitoring remain inadequate.	1. Implementation and automation of Transfer and Posting policy. 2. Development of SOPs and criteria for the placement of Head Teachers. 3. School Management Manual including KPIs of HOIs given in School management manual implemented and given weightage in PER. 4. Regular objective reporting by Area Education Officers (AEOs) on the performance of HOIs. 5. Training sessions of HOIs planned and conducted regularly.	1. Automated and digitized transfer and posting policy is implemented. 2. 100% HOIs deputed or planned based on pre-defined /approved criteria 3. Timely promotions/ recruitment. 4. HOI completed annual training as designed by Training wing. 5. Notified School Leadership Standards. 6. Awareness among staff about reporting lines and decision-making protocols.	1. Notified School Leadership standards. 2. 80% of all sanctioned key leadership posts are filled. 3. Transfer and Posting policy automated and implemented. 4. 80% of targeted administrators or /HOIs have received mandatory instructional leadership and change management training. 5. 80% of school leaders implement School Management Manual.	1. 100% leadership posts to be filled on merit, pre-defined criteria. 2. 90% of HOIs are trained. 3. 100% school leaders implement School Management Manual.

Policy Review Mechanism	1. Absence of a formal structure for a dedicated Policy and Planning (P&P) cell. 2. Non-availability of formal policy and governance. review framework. 3. Absence of official repository of policies.	1. FDE establishes, notifies and funds a dedicated P&P Cell with clear TORs and specialized staffing. 2. Official policies repository to be developed.	1. A notified functional P&P cell established. 2. Approved FDE Policy and Governance manual. 3. Annual policy review. 4. The FDE website provides access to all policies.	1. A dedicated P&P cell established. 2. FDE Policy and Governance manual developed and approved. 3. Official policy repository available on website.	1. Institutionalized review cycles every year. 2. 100% of all FDE policies are reviewed according to the mandated institutional cycle. 3. At least one comprehensive review annually by 2030.
Monitoring, Evaluation and Data System (M&E)	1. Schools report manually with limited data. 2. M&E requires digitization to get real time data in one click. 3. Notified budget allocation for M&E activities for cluster in charges under the respective AEO.	1. Online data bank established at AEO offices and Headquarter. 2. Training conducted for heads and staff in M&E tools and data protocols. 3. M&E framework connected to EMIS for real-time tracking and decisions developed. 4. Global and national best practices used for data analytics applications to guide school-level improvements.	1. AEOs offices have M&E officials and online data bank. 2. Heads and staff trained in M&E tools and data protocols. 3. Approved M&E framework connected to EMIS for real-time tracking and decision making.	1. ALL AEO offices will develop online data banks. 2. 50% heads and staff trained in M&E tools and data protocols. 3. M&E framework developed, approved, and connected to EMIS for real-time tracking and decision making.	1. 100% heads and staff trained in M&E tools and data protocols. 2. Institutionalize data driven decisions.
Policy Alignment with SDG 4 & National Policy	FDE policies on access, quality, and inclusion are not aligned with the NEPDF 2024 and the objectives of SDG 4.	1. FDE formally mandates P&P Cell to conduct the initial NEP/SDG 4 gap analysis and policy	1. NEPDF 2024 and SDG 4 aligned FDE policies. 2. Annual FDE SDG 4 progress reporting.	1. 80% FDE policies aligned with the NEPDF 2024/SDG 4, with mandatory annual FDE SDG 4	1. 100% of FDE policies are aligned with NEPDF2024 and SDG-4.

		comparison. 2. Develop and pilot the comprehensive Policy Alignment Matrix Certification. 3. Institutionalize the annual process for compiling and submitting the FDE SDG 4 Progress Report.		Progress Report submission.	
Foundational Learning Integration	1. Policy launched in 2024, limited integration in the primary curriculum. 2. Presently ECE 2 Years only in 70 schools 3. No identification of children learning difficulties. 4. No budget allocation for supplementary reading material & online learning platforms. 5. Pilot data of dyslexia project available.	1. Incorporate Federal Foundational Learning Policy 2024 principles into all FDE policy documents and curricula. 2. ECE (2 years) in all schools with one-shift approach, sufficient trained staff with 10:1 or 15:1 STR. 3. Gradual transition to grade1 SLO and curriculum alignment. 4. Identify and provide support to students with learning difficulties. 5. FLN teams at sector levels to enhance scope of work at elementary level. 6. Ensure availability of subject experts, i.e. by outsourcing or rationalization and timely recruitment for	1. Policies aligned with Foundational Learning Standards. 2. Targeted FLN support in all primary schools. 3. Schools with grade-wise FLN achievement tracking record. 4. Foundational learning dashboards operational at school level. 5. Institutions reporting FLN progress on EMIS or M&E systems. 6. Outsourcing of hiring remedial therapist. 7. improve FLN learning outcomes 8. Improvement in FLM schemes in NAT, LANA and reduction in learning poverty. 9. Sufficient supplementary material to available for students.	1. 100% implementation of reading hour in all primary schools /sections. 2. 75% of primary curriculum units are revised as FLN-compliant. 3. 80% of primary schools operate the FLN-aligned ECE structure. 4. Allocation of budget for FLN external assessment. 5. Primary education stages have been redefined, with the foundational stage covering ages 4–5 through Grade III and focusing solely on English, Urdu, and Mathematics. The second stage	1. 100% of the primary curriculum is FLN-aligned. 2. 100% of primary curriculum revised. 3. FDE achieves a 95% student proficiency rate in foundational literacy and numeracy benchmarks. 4. Continued Provision of budget for FLN external assessment. 5. 100% of FDE schools are equipped with grade wise FLN tracking mechanism. 6. 80% of students with learning difficulties integrated into general education

		vacant posts. 7. Identification of students with learning difficulties 8. Appointment of remedial therapist at a school level. 9. Continued provision of budget for FLN external assessment, supplementary material honorarium and POL for FLN field team to work and commute.		encompasses Grades IV–V with a broader curriculum. 6. 60 remedial therapists recruited and deployed across prioritized urban and rural clusters. 7. Initial screening (for learning difficulties) completed for 100% of primary-level students in all sectors.	settings with full remedial support
Admissions & Equity Policy Reform	1. Administrative barriers (e.g., Form B, age limits). 2. As per FDE/National Survey, about 15% of school-age children in FDE jurisdiction are OOSC. 3. Current enrollment rate of OOSC via special programs is less than 10% of total enrollment.	1. Admission reforms shall be implemented (Form B removed 2025). 2. Promote equitable access for OOSC. 3. Develop targeted interventions for OOSC. 4. A multi-faceted sequenced plan for children of 5-8 years mainstreams with incentives scholarship/day meal. For students of 9-12 years, admission in ALP centers.	1. Reduction in the OOSC population. 2. Enrollment to target ratio for OOSC program. 3. Simplified formal Enrollment Policy.	1. FDE OOSC program will achieve a 60% enrollment rate relative to the targeted OOSC population.	1. All administrative barriers removed. 60% enrolment of OOSC. (age5-8)
PILLAR-II Attainment of Student Learning Outcomes					
Intervention	**Baseline**	**Actions**	**Outcomes**	**Target 2026-2027**	**Target 2028- 2030**
Scheme of Studies	1. Scheme of studies developed after the development of curriculum	1. Mapping of scheme of studies with 21st century	1. Revised and updated Scheme of Studies to	1. Scheme of studies for all subjects developed	Review of scheme of studies if curriculum is

	2020. 2. Identifying the gaps and inclusion of more activities required to incorporate 21st century skills is required. 3. These themes are embedded in various subjects but there is a need to add more practical based activities so that there is a more visible change in the attitude and behavior of individuals.	skills. 2. Review and revision of scheme of studies in coordination of all concerned departments such as FDE, FBISE before the development of curriculum. 3. Integrate the scheme of studies with assessment and establish a mechanism to evaluate the psychomotor and affective domains alongside the cognitive domain.	ensure a well-rounded educational process that fosters holistic development encompassing cognitive, social- emotional, ethical, and vocational competencies across all levels of learning. 2. Integration of 21st-century skills: critical thinking, creativity, collaboration, communication. 3. Inclusion of cross- cutting themes: SEL, climate change, gender equity, civic values.	by NCC.	revised again.
Curriculum and Instructional Alignment	1. National curriculum is followed. 2. NCC has notified curriculum of financial literacy, environment for living, entrepreneurship and digital literacy, character education that are currently being implemented as non-credit curricula in FDE institutions. 3. Instructional guide is available.	1. Assessment of present instructional quality in FDE schools. 2. Instructional guides (Hard and Soft) should be updated and implemented. 3. The best teaching and learning practices shall be used in the classrooms. 4. Use of instructional time consistent with subject weightage. 5. Effective training and follow up mechanism required. 6. Classroom observations	1. Curriculum with all non-credit subjects integrated in compulsory subjects (at all levels) and aligned with global proficiency frame work at primary level	1. Best teaching and learning practice 60% FDE institutions ensuring students achieve the established standards, benchmarks and SLOs	1. Best teaching and learning practice 80% FDE institutions ensuring students achieve the established standards, benchmarks and SLOs

		and students feedback mechanisms should be developed for identifying gaps and providing support for improvement.			
Assessment Mapping and Assessment and Evaluation Wing establishment	1. Absence of Assessment and Evaluation Wing. 2. System of Formative Assessment exists. 3. Teachers not well trained in assessment methods. 4. Assessment toolkits for Prep-VIII class developed and implemented.	1. Assessment and Evaluation Wing shall be established. 2. Training of teachers on using assessment toolkit with a follow up mechanism of monitoring and assessment. 3. System of formative assessment to be strengthened and digitalized 4. Analysis of assessment results be done and accountability needs to be ensured. 5. KPI related to assessment should be an integral part of annual PERs.	1. Assessment and Evaluation Wing ensuring improved quality of formative and summative assessment. 2. Data driven policy decision through digitalizes the assessment of core SLOs.	1. Assessment toolkits provided by FDE in Sep 2025, ensuring its full implementation in 2026-27 session. 2. Assessment and Evaluation Wing notified and start functioning.	1. Reviewing assessment framework by the Assessment & Evaluation Wing. 2. Digitization of formative assessments of core SLOs.
Enhanced Textbook Quality Assurance	1. Textbook/ curriculum/ assessment issues are not identified and addressed by FDE, NBF and NCC. 2. All textbooks are reviewed by teams of FDE practicing teacher but feedback is not incorporate in textbooks.	1. Reviews to be incorporated in textbooks and suggested changes to be done. 2. Best textbooks should be selected from a pool of available books. 3. Incorporate in textbooks cross- cutting themes	1. Quality text books. 2. NCC to improve textbooks review mechanism & NOC issuance	1. 80% textbooks aligned with national curriculum and approved Scheme of Studies. 2. 100% textbooks content mapped to grade- level learning outcomes.	1. 100% textbooks aligned with national curriculum and approved. New textbooks to be made available according to the new/revised curriculum. 2. Teacher guide to be

		(e.g., SEL, climate change, entrepreneurship, character education, coding) through examples, stories, and activities. 4. Chapters with formative assessment tasks or reflective questions. 5. Textbooks adapted for children with disabilities (e.g., large print, Braille, audio). 6. Upload approved versions to portals (e.g., e-Taleem, FDE platform). 7. Establish Textbook QA Committees and include curriculum experts, teachers, publishers, and inclusive education specialists. 8. Map textbook content to national curriculum and grade- level competencies.		3. Textbooks incorporating cross-cutting themes (e.g., SEL, climate, gender equity). 4. Quality Assurance mechanism for development of textbook in place.	developed with each textbook. 3.

Subject specialists in priority areas such as Languages, Math, Science, and STEM.	1. Most of the subject specialists are not equipped with required skills and conceptual understanding of their subject. 2. Non-availability of subject specialist in most primary & high schools.	1. Complete needs assessment on no. of subject specialists each school requires and number of teachers approaching superannuation and rationalization of teachers. 2. Needs assessments data shall be used for new recruitment.	1. All institutions have sufficient no. of subject specialists in priority areas like Languages, Math, Sciences, and STEM.	1. Incremental assessment of schools needs to be completed. 2. Subject specialists to be recruited and posted in schools according to their needs. 3. Complete rationalization of teachers as per number & subject.	1. Fast track recruitment, no vacant post with adequate subject specialist in each school.
Academic Coordinators	1. Positions of academic coordinators do not exist to support teachers in academic matters and who are accessible and readily available to them at school and AEO level.	2. A total of 6 Academic Coordinators along with their academic teams, will be placed in all Area Education Offices (AEOs) with a clear mandate to mentor teachers and ensure instructional quality based on the revised curriculum.	1. Quality instruction and strengthened mentoring and academic support system. 2. students in each school meet grade-level benchmarks in core subjects.	1. Appointment of Academic coordinator at AEO & School level SOPs/ TORs developed regular visit documented.	1. 50 % students in each school meet grade-level benchmarks in core subjects.
Skill-based education (Middle-Tech, Matric-Tech, Inter-Tech	1. Matric-Tech in 06 Schools with the support of NAVTTC	1 Initiate non-credit/skill-based education from Class 6. 2 Integrate skill-based education as a compulsory life skill component for all students from Class 6, while allowing students to choose it as an optional subject for	1. A comprehensive skill-based education framework integrated, from Middle School (Class 6) through to the Inter-Tech (Intermediate) level.	1. Initiate matric tech in 170 institutions and inter-tech in 50 institutions. 2. Aptitude testing of students for technical education 3. appointment of tech trade fellows. 4. Provision of budget for trade instructor	1. By 2030, 100% integration of skill-based education from Class 6, fully mainstreamed into the national curriculum with standardized certification. 2. All middle, high schools and colleges

		specialization. 3 Ensure dedicated budget allocation for the development of equipped labs in every middle and high school. 4 Conducting infrastructure audits to fully equip labs through performance-based budgeting and formalizing HEC pathways to bridge technical streams with higher education. 5 Industry-aligned NAVTTC certifications, specialized teacher recruitment, and a standardized professional development calendar.		and consumables items and books. 5. Development of curriculum and books for new trades.	will feature fully equipped, budget-sustained labs and functional. 3. Inter-Tech pathways to AD Tech / BS Tech, BS Engineering, with technical streams continuously expanded based on industry demand.
PILLAR III **Enabling Environment and Resource Equity**					
Intervention	**Baseline**	**Actions**	**Outcomes**	**Target 2026-2027**	**Target 2028- 2030**
Infrastructure and Resources	1. Annual School census is regularly conducted. 2. No Budgetary provision in repair and maintenance for institutions. 3. Missing facilities project work in progress in 167 institutions.	1. Conduct infrastructure Audit. 2. Renovate dilapidated classrooms. 3. Upgrade furniture, sanitation, electricity, and boundary walls, internet facility, solarization in rural	1. Certified FDE schools on minimum Infrastructure and Safety Standards. 2. Safe school infrastructure. 3. Equipped classrooms.	1. Infrastructure Audit completed for 100% of institutions. 2. 40% of dilapidated schools are renovated and classrooms with upgraded furniture.	1. 80% compliance of gaps indicated in the audit conducted in 2027.

		schools? 4. Introduce annual maintenance fund. 5. Allocate budget to maintain school's standard requirements and building. 6. provision of camera, fire extinguisher etc.			
FDE Schools in Rented Buildings	1. Rented school buildings with limited infrastructure (e.g., no playground or lab). 2. Previous school infrastructure record.	1. Prioritize land acquisition for rented schools. 2. Construct purpose-built buildings. 3. Compliance with minimum infrastructure standards (classrooms, sanitation, water, electricity).	1. Develop minimum infrastructure standards for primary, Secondary schools and college. 2. Purpose built FDE schools meeting the minimum infrastructure standards.	1. Schools identified with high needs will be covered in Phase I.	1. Remaining schools covered in phase-II
Student–Teacher Ratio (STR) and Section Students Ratio	1. Previous STR Reports. 2. Baseline as per education policy 2009: ECE 1:25, Primary 1:40 STR 3. Comprehensive STR and Section teacher ratio is not defined.	1. Setting STR Standards as per levels. 2. Creation of STR enforcement framework. 3. Audit Set and Enforce STR Standards. 4. Hard area allowance for teachers serving in hard and rural areas.	1. Uniform average student–teacher ratio meeting the national standards in primary and secondary levels. 2. Improved teaching learning quality at all levels.	1. 60% of FDE schools achieve and maintain compliance with the FDE Optimal STR Policy, with the STR Equity Variance Index reduced by 80%.	1. 80% of FDE schools achieve and maintain compliance with the FDE Optimal STR Policy, with the STR Equity Variance Index reduced by 90%.
Assistant Teachers and Additional Teaching Staff	1. Overcrowded classes with 60 plus enrollment at ECE, primary and secondary level with single teacher. 2. Visiting faculty regulation submitted in cabinet (approval awaited)	1. Appoint Asst. Teacher (AT) after 30+ students in each class at primary level. 2. Appoint Asst. Teacher (AT) after 40+ students in each class at Secondary level.	1. Formal Assistant Teachers Cadre Policy approved and integrated into the FDE HR Policy/hiring of AT through outsourcing. 2. Visiting faculty regulation approved and STR improved.	1. Deployment of ATs is successfully completed in 20% of high-need schools.	1. Deployment of ATs in 60% of high-need schools.

Strengthening of School management Committees	1. SMCs exist but, in some cases, inactive. 2. Lack of SMC training.	1. Circulate Notified SMC Policy to all schools. 2. Conduct SMC training and digital tracking. 3. An Audit of active SMCs shall be conducted.	1. SMCs are active, functional and maintain complete records.	1. Notified SMC policy implemented in 100% of schools. 2. At least one SMC training per year is conducted at cluster level	1. 100 % functional SMCs
Operational SMC Bank Account for All Schools	1. SMC bank account close due to single treasury account policy (STA)	1. Take-up the matter regarding STA at competent form 2. Open bank accounts for all schools. 3. Train heads /DDOs in financial management. 4. Development of SOPs for account operations (opening, deposits, withdrawals, documentation).	1. FDE schools have active bank accounts managed by heads with financial management training.	1. Process Amendment in SMCs rules and operationalize SMC accounts 2. 80% of FDE schools have active and operational bank accounts and comply with bank account SOPs (transactions, documentation, reporting)	1. 100% of school have active bank accounts. 2. Bank accounts are audited annually, achieving 95% compliance with the Financial Management Policy
School Management Systems (SMS)	1. Fragmented development and implementation of school development plan without involving the stakeholders.	2. All schools should develop School Development Plans (SDPs) every two year, connected with the previous year's plans. 3. Introduce school-level performance reviews. 4. AEOs shall conduct review meetings and follow up visits. 5. Reward system should	1. All Schools with SDPs. 2. The annual school grants disbursement based on SDP quality and implementation outcomes. 3. All HOIs are trained with the mandatory School Leadership and Planning training.	1. All schools have updated School Development Plans (SDP) aligned with FDE goals. 2. All AEOs will develop an annual calendar of school visits and review meetings. 3. 80% of heads and vice-heads trained in	1. Institutionalize annual SDP reviews and link school grants to SDP outcomes. 2. Introduce School Recognition and Incentive Program based on performance.

		be implemented for the successful implementation of SDP.		School Leadership and Planning.	
Optimizing Ancillary Staffing and Outsourcing Support Services	1. Average number of support staff per school. 2. Average support staff ratio achieved across primary and secondary levels. 3. The schools are covered by the centralized, outsourced cleaning and maintenance contracts. 4. Admin Reports	1. Conduct needs assessment to identify staff shortage in each school. 2. Recruit clerical/assistant staff in schools lacking record or office support. 3. Recruit janitorial staff in all schools where the enrollment exceeds the 500:3 student-to-staff ratio. 4. Recruit janitorial and clerical staff through outsourcing. 5. Development of cleaning and maintenance standards for ancillary staff. 6. Need based provision of support staff as per the area and infrastructure of school.	1. Reduction in the average number of hours spent by teaching staff on non-academic administrative duties. 2. Data entry operators in all schools/colleges. 3. Clean & well-kept school/ college premises.	1. 70% of FDE schools have the Ancillary/ support Staffing Standard for Gardener, Naib Qasid, janitorial staff, watchman / chowkidar.	1. 100% of FDE schools achieve and maintain the FDE Non-teaching staffing standards NTSS. 2. Outsourcing is fully institutionalized and covers 100% of all cleaning and maintenance services across the FDE system.
Capacity building of non-teaching staff/ managers/ admin officers	1. Fragmented training for admin staff. 2. Lack of standardized training modules, HR manual, operational records with significant dependency on teaching staff for admin tasks.	1. Establishment of a "School Management Institute/ Cell for capacity building of administrative staff within the Federal College of Education (FCE)/Training wing of FDE. 2. Design specialized	1. Admin/Management staff certified in standardized management /digital modules.	1. School Management Institute/ Capacity Building Cell established. 2. Development of training modules for admin staff. 3. 50% of non-teaching staff trained in basic digital tools and safety	1. 70% of non-teaching and admin staff certified in their respective domains. 2. Admin offices are automated, paperless HR and financial management systems across all 432 institutions.

		admin/ management tracks. 3. Deploy mandatory hybrid training (virtual via T-LMS and in-person workshops) and link certification to career progression.		protocols.	3. Institutionalizing administrative excellence.
Access to Health/Mental Health Services in Schools	1. Health and mental health services do not exist. 2. Lack of empirical evidence regarding systematic health tracking, though some school management documentation exists.	1. Establish MoU with ICT Health Department Schedule biannual medical check-ups. 2. Institutionalize screening in annual school quality assurance framework. 3. Issuance of policy directive and integration of biannual mental health/ health screening schedules, check- ups in the academic calendar. 4. Identify mental health /health issues for follow-up treatment or referral. 5. Develop digital health profile in the FDE system. 6. Coordinate with Capital Hospital, CDA, and Ministry of Health for medical teams to conduct health sessions. 7. Train health focal persons (1 per school).	1. Students receive biannual comprehensive mental health/ medical screening and checkups.	1. Bi-annual screening of enrolled students in 70% of schools. 2. 85% of identified cases receive follow-up or referral. 3. 70% of schools conduct at least one health awareness session per term. 4. Digital health profile will be developed in 100% schools.	1. 100% biannual screening and check-up compliance. 2. 100% of students have digital health profiles.

PILLAR-IV Professional Development Framework					
Intervention	**Baseline**	**Actions**	**Outcomes**	**Target 2026-2027**	**Target 2028- 2030**
Mandatory Professional Development Governance	1. PD largely discretionary; fragmented training.	1. Notification of SRO making MIP & CPD mandatory for confirmation and promotion. 2. Draft SRO; legal vetting; DG approval; DPB integration; orientation of admin officers.	1. SRO notified; DPB checklist revised	1. Mandatory PD fully enforced for all new inductions & promotions.	1. PD embedded as irreversible career gatekeeper.
Credit Hour (CH) Standardization	1. No unified equivalence; inconsistent certificates.	1. Issue policy; align with NACTE/HEC; train AD-Ops & partners. 3. Adoption of unified credit-hour equivalence (16 hrs = 1 CH)	1. Standard equivalence policy issued	1. All FDE/ FCE/ NIETE trainings mapped to CH	1. National & international credit recognition
Mandatory Induction Program (MIP)	1. Ad-hoc induction; uneven quality.	1. 48-hour structured induction for all new teachers & VPs. 2. Annual induction calendar; MT deployment; monitoring via T-LMS.	1. Staff with MIP completion.	1. 100% new inductees complete MIP within 6 months	1. MIP institutionalized with mentorship.
Foundational Pedagogical Capacity	1. Traditional lecture-based teaching.	1. Job-embedded training; PLCs; mentoring cycles. Core pedagogy, ethics, assessment, EdTech & AI modules.	1. Classroom practice improvement.	1. Majority teachers demonstrate IBL/PBL, student centered teaching/learning.	1. Inquiry & PBL mainstreamed.
Foundational Literacy & Numeracy (FLN)	1. Dedicated FLN training for Primary School Teachers/ Senior Elementary Teachers Weak early-grade outcomes.	1. Targeted modules; coaching; use of data for remediation.	1. FLN diagnostic gains	1. Improved Grade 1–3 literacy & numeracy	1. FLN mastery sustained system-wide

CPD for Teacher Promotion		1. 96-hour CPD (Action Research, Data, Digital & AI). 2. CPD attendance based. Structured CPD blocks; peer review; DPB alignment.		1. 100% promotion cases supported by evidence. 2. Action research & portfolios completed.	1. 2.Research-informed teaching culture.
Action Research Culture	1. Action Research is not under practice.	1. Minimal practitioner research. 2. MT mentoring; research templates; review panels. 3. Mandatory action research as promotion deliverable.	1. Teachers experienced in AR projects.	1. AR embedded in promotion cycles.	1. Evidence-driven instructional improvement.
Digital Competency & AI Integration	1. Uneven ICT usage. 2. Digital competency framework & AI application	1. Skill diagnostics; tiered training; ethical AI guidance.	1. Digital proficiency levels.	1. Minimum defined proficiency for promotion.	1. Advanced AI-supported instruction.
Leadership CPD (VPs & Principals)	1. Limited leadership preparation.	1. 96-hour leadership CPD (IL, SDP, Finance, Procurement).	1. Completion & capstone projects. Case-based learning; simulations; mentoring.	1. Instructional leadership standardized	1. High-performing school leadership cadre
Instructional Leadership (IL)	1. Inconsistent academic supervision.	1. IL rubrics; coaching by Senior MTs.	1. PLC leadership, walkthroughs, feedback cycles.	1. Regular calibrated walkthroughs. 2. Quality of feedback & Professional Learning Communities records.	1. Sustained instructional coherence.
School Development Planning (SDP)	1. SDP development process exist but unstructured.	1. Compliance-focused SDPs. 2. Hands-on SDP labs; data alignment.	1. Mandatory SDP as leadership deliverable. 2. Quality & implementation rate	1. SDPs linked to student outcomes.	1. Strategic planning culture.
Dedicated Master Trainer Cadre	1. FPSC / internal induction; service rules enforcement. 2. No dedicated cadre.	1. Recruitment & deployment of MTs (BPS-17 to 19). 2. MT positions notified & filled.	1. MT Cadre	1. Minimum 25 MTs operational.	1. Full cadre with career progression.

Master Trainer (MT)Quality Assurance	1. Mater Trainers Cader non existence.	1. Mandatory MT CPD (6 CH / 3 years). 2. University partnerships; funded CPD.	1. MT with CPD completion.	1. MTs updated in pedagogy & research.	1. Scholarly trainer culture.
Training Wing Establishment	1. Fragmented responsibilities under different sections in FDE.	1. Approvals; staffing; capacity building. 2. Functional Training Wing under Director Academics &QA.	1. Wing notified & staffed	1. 1Fully functional wing.	1. Mature PD Wing in FDE.
Training-LMS (T-LMS)	1. Manual records.	1. Centralized digital PD & credit tracking. Software procurement or decision which LMS to be used; HR integration; training.	1. Digitized staff profiles and PD data.	1. All PD data digitized.	1. Predictive analytics & automation.
Data-Driven Decision Making	1. Input-based reporting.	1. KPIs & dashboards (Guskey Levels 1–5). 2. Build analytics capacity; standard tools.	1. 1.Impact indicators tracked	1. 1. Level 4–5 evaluations routine.	1. 1. PD impact on student outcomes.
Quality Assurance (QA)Framework	1. Limited QA	1. Guskey evaluation & quarterly reporting. Train evaluators (M&E wing FDE, + Master Trainers with the help of AD Data; standard instruments.	1. Completion of Evaluation cycles.	1. QA informs redesign of PD.	1. Continuous improvement loop.
Credit Equivalence Review Committee (CERC)	1. No equivalence body.	1. Notify CERC; academic representation. Vetting of external CPD.	1. CERC notifications	1. All external CPD standardized	1. International equivalence achieved
Strategic Partnerships	1. Informal collaboration	1. Formal agreements; joint planning. MoUs with FCE, universities, NIETE.	1. Signed MoUs	1. Joint curriculum & training	1. Sustained academic ecosystem
International Training & Compliance	1. Ad-hoc nominations.	1. Compliance register maintained. T-LMS tracking; legal enforcement.	1. Nomination protocols & service bonds.	1. Zero post-training defaults	1. High-return international exposure

PILLAR-V DIGITAL LIETARCY					
Intervention	**Baseline**	**Actions to be Taken**	**Expected Outcome**	**Target 2026-2027**	**Target 2028- 2030**
Ed Tech Integration	1. Approx. 50% of teachers are digitally certified. 2. e-Taleem Portal, NIETE Learning Management System along with certification for primary grades are available. 3. Limited usage of LMS. 4. Ed Tech integration related data is partially available.	1. Teachers integrate technology in lesson plan framework. 2. LMS usage reports to be linked with Performance Evaluation Reports (PERs). 3. PIE and FDE-M&E section conduct research. 4. FDE M&E wing conducts needs assessment.	1. All digital tools and Edtech have SLOs aligned digital content according to the latest curriculum. 2. Use of digital tools/content at all levels (primary to undergrads)	1. 80% of teachers will integrate EdTech tools into lesson plans and assessments. 2. Need-based research studies will be conducted. Ed Tech needs assessment will be done.	1. 100% of teachers will embed EdTech tools in lesson planning and assessments.
Digital Tools Availability/ Edtech Platforms	1. Approximately 15% of classrooms have digital devices. 2. Multiple digital tools have been introduced in schools without adequate consideration of their relevance to the learning experience. 3. The digital tools and EdTech platforms are not effectively integrated into lesson plans or classroom activities.	1. Provision of Edtech tools gradually in all classrooms to avoid overload. 2. Develop SOPs for tool usage and classroom management. 3. Conduct comparative analysis of leading platforms. 4. Develop LMS/ platform for gauging student learning outcomes. 5. Deployment of 22,000 chrome books across FDE institutions. 6. Implementation of FDE-NTC Agreement; 7. - Installation of solar-	1. Updated tools/platforms (Smart classrooms equipped with LMS, interactive / smart boards/ LED screens, and connected classrooms). 2. Tele School app 3. Kahoot, availability of need based digital content and devices at all institutions. 4. Availability of screens in every classroom. 5. Upgraded IT infrastructure, devices and stable Wi-Fi connectivity in every FDE institute and their maintenance plans.	1. 80% of schools with Edtech infrastructure for all digital tools.	1. 80% of schools with Edtech infrastructure for all digital tools

		backed network racks. 8. -Ensure stable internet and classroom connectivity. 9. - Provision of dedicated High-Speed Internet Fiber/Broadband to all 432 institutions via National Telecommunication			
School-Level Teacher Training and Rationalization of Subject Teacher Deployment	1. Approx. 50% of teachers are digitally certified and use digital devices. 2. There is no technical assistant or maintenance provided.	1. Rationalization and outsourcing of IT staff. 2. Need-based new recruitments. 3. Conduct need-based digital skills assessments, targeted digital tools training and school-based sessions to strengthen teachers' capacity in utilizing diverse platforms, reading resources, and learning apps.	1. School and college teachers are trained to use digital tools and Edtech platforms. 2. Well-trained technical staff are available according to the requirements in every institute.	1. 80% of teachers and IT staff are trained in relevant edtech trainings and achieve digital competency certification to effectively deliver tech-enabled education.	1. 80% of teachers and IT staff are trained.
Gamified and Simulation-Based Content	1. Chromebooks/ Computing devices and digital content (SLO-based gamified & simulation tools). 2. Approximately 30% of teaching staff are already using these SLO based Gamified and simulation-based digital content/ chrome books.	1. AR/VR-based science and mathematics labs development. 2. Teachers training in using simulation software to introduce useful platforms to promote gamified learning and interactive simulations in classrooms.	1. AR/ VR based science and mathematics labs established. 2. SLO based gamified and simulation-based digital content used by teachers at every grade level. 3. Digitally fluent, critical minded, collaborative, and future ready students.	1. 60% of teachers use gamified and simulation- based content in class activities to enhance engagement, retention, and critical thinking. 2. Students gain fluency in using devices for learning.	1. 80% of teachers will integrate gamified and simulation- based content in class activities. 2. Students gain fluency in using devices for learning.

		3. Use of Computing devices/ Chromebooks focusing on interactive and gamified learning. 4. Conduct subject-wise digital competitions. 5. Track engagement levels and learning outcomes.			
Hybrid Access Models	1. Digital Hub-Connected Classrooms to bridge the rural-urban teacher gap using studio teachers. In pilot phase 80 schools connected via screens/cameras. 2. Hybrid access models data not available. 3. Digital content exists (Tele school/ e-Taleem) but usage is low and unmapped.	1. Mapping digital assets (videos, simulations, quizzes) to the National Curriculum SLOs. 2. Develop both online and offline content access options. 3. Use mobile apps, SD cards, and printed QR codes for content delivery. 4. Establish community learning centers for shared use. 5. Encourage parental involvement through digital monitoring. 6. Evaluate data usage and access trends for improvement.	1. Hybrid Access Models integrating in person and online learning to continue learning process despite extreme weather, road blocks and lockdowns. 2. Lesson Plans with embedded digital assets; Usage of AI-remedial tools. 3. Digital Hub Connected Sessions delivered weekly.	1. 60% of schools use Hybrid Access Models to improve reach and educational continuity.	1. 80% of schools use Hybrid Access Models.