



DRAFT NATIONAL CURRICULUM FRAMEWORK 2026

**National Curriculum Council Wing
Ministry of Federal Education & Professional
Training, Islamabad**

DRAFT

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List of Acronyms

AAC	Assistive and Augmentative Communications
AEPs	Alternative Education Programmes
ALPs	Accelerated Learning Programmes
CEFR	Common European Framework of Reference for Languages
CIF	Curriculum Implementation Framework
CPD	Continuous Professional Development
CIP	Curriculum Implementation Plan
CQI	Continuous Quality Improvement
CRC	United Nations Convention on the Rights of the Child
CRPD	Convention on the Rights of Persons with Disabilities
ECCE	Early Childhood Care and Education
ESD	Education for Sustainable Development
FBISE	Federal Board of Intermediate & Secondary Education
FLN	Foundational Literacy and Numeracy
FLS	Foundational Learning Study
HEC	Higher Education Commission
ICT	Information and Communication Technologies
IPEMC	Inter Provincial Education Ministers' Conference
LaNA	Literacy and Numeracy Assessment
MoFEPT	Ministry of Federal Education & Professional Training
MOI	Medium of Instructions
MTB-MLE	Mother Tongue Based-Multilingual Education
NACTE	National Accreditation Council for Teacher Education
NAT	National Assessment Test
NCCW	National Curriculum Council Wing
NCF	National Curriculum Framework
NCP	National Curriculum of Pakistan
NEPDF	National Education Policy Development Framework
NFE	Non-Formal Education
NFECF	National Non-Formal Education Curriculum Framework
NGPF	National Gender Policy Framework

OOSC	Out of School Children
PDF	Professional Development Framework
PIE	Pakistan Institute of Education
PIRLS	Progress in International Reading Literacy Study
PPPs	Public Private Partnership
RDI	Research, Development, and Innovation
SBA	School-Based Assessment
SDG-4	Sustainable Development Goal-4
SLOs	Student Learning Outcomes
SoS	Scheme of Studies
STEAM	Science, Technology, Engineering, Arts, and Mathematics
TCF	Teacher Competency Framework
TIMSS	Trends in International Mathematics and Science Study
TTIs	Teachers Training Institutions
UDL	Universal Design for Learning
UNCRC	UN Convention on the Rights of the Child
UNCRPD	UN Convention on the Rights of Persons with Disabilities
UNDP	United National Development Programme
UNESCO	United Nations Educational, Scientific and Cultural Organization
WEF	World Economic Forum

Acknowledgement

Preamble

The National Curriculum Framework (NCF) 2026 is a guide to support the transformation of school education in Pakistan. The Framework outlines principles and prioritises learning areas in curriculum development towards education that will ensure equal opportunities of progress for all children of school age. It reaffirms the status of education in the Constitution, endorsed as a fundamental right, and as a collective responsibility of the state. The NCF 2026 establishes a common reference point for minimum learning standards across provinces and regions, with flexibility in implementation that enables each province and region to design curricula and learning paths as per their contextual realities and needs.

The flexibility for contextual adaptation is provided through the Core-plus Principle, which recognises the importance of diversity in curriculum design and the need to balance it with nationally shared learning expectations and values. The Framework guides the development of an education system that prepares learners for academic success, ethical conduct, responsible citizenship, and meaningful participation in national and global contexts.

The Framework is anchored in Pakistan's ideological and constitutional foundations. It draws upon the principles of Islam reflected in the Holy Quran and Sunnah, aligns with the Constitution of the Islamic Republic of Pakistan of 1973, with the vision of Quaid-e-Azam Muhammad Ali Jinnah, and with the philosophy of Allama Muhammad Iqbal, all aimed at a just and progressive society.

The NCF 2026 promotes competency-based learning, inclusion, equity, stewardship of the environment, adaptation to new realities forced by climate stress, and the integration of technology, with ethical and age-appropriate use. It seeks to strengthen curriculum design, pedagogy, and assessment aligned with national aspirations.

The Framework is a result of national coordination for improving quality, relevance, and congruence in education systems across the country. It highlights persistent challenges in curriculum design and implementation and provides guidance for the avoidance of overload and redundancy in content. It also guides curriculum developers in the alignment of assessments with curricular objectives and in the strengthening of linkages with teacher preparation and classroom practice. Most significantly, the Framework emphasises the need for systemic improvements in the current delivery structures, as without these changes the requirements of a forward-looking curriculum cannot be implemented.

1 Introduction and Objectives

1.1 Introduction

The National Curriculum Framework (NCF) 2026 guides the development of a curriculum for the 21st century through a learner-centred approach that is rooted in the diverse contextual realities of Pakistan, to address the imperatives of fast-tracking education progress for all children, to prepare them for life and livelihood in the 21st century, and to imbibe in them the values set by the nation in the Constitution of the Islamic Republic of Pakistan.

It sets out a unified and forward-looking direction for education in Pakistan and serves as the overarching policy guide for the development of the scheme of studies, curricula, pedagogy, and implementation systems. The Framework articulates clear learning expectations across stages and a path for curriculum design that is coherent, relevant, and implementable. Within Pakistan's federal structure and constitutional provisions, it provides a common reference point for national coherence while enabling contextual adaptation.

The Framework recognizes education as a transformative process that extends beyond the transmission of knowledge and encompasses the holistic development of the learner. It envisions individuals who are intellectually capable, ethically grounded, socially responsible, and equipped with the competencies required for lifelong learning and meaningful participation in a rapidly evolving world. By integrating knowledge, skills, values, and dispositions, the NCF positions education as a driver of both individual growth and national development. The framework is aligned with the National Education Policy Development Framework (NEPDF) 2024, ensuring coherence with national priorities and reform imperatives.

The NCF repeatedly brings to the fore the importance of recognition of the curriculum as a public policy document that can only be implemented if pre-requisites are identified through a plan and the required resources provided. The Framework, therefore, extends beyond the guidelines for curriculum to include pedagogy, assessment practices, teaching-learning materials, and classroom interactions as components of the value chain for its implementation. It guides on approaches to strengthen alignment across curriculum, textbooks, pedagogy, assessment, and teacher development in line with national priorities and emerging global needs. It also ensures that learning is meaningful, inclusive, and contextually responsive. Approaches to inclusion of diverse learning streams of non-formal education, special and inclusive education and madrassas have also been outlined.

The Framework also marks its limitations. NCF 2026 alone cannot achieve Pakistan's education objectives. Even when adapted to the contextual realities of the learner, implementation of a quality curriculum that meets the demands of the 21st century is not possible on a large scale under the current state of delivery structures. A curriculum framework (and the consequent curriculum) can map an education design for equitable education outcomes for all children, but it cannot achieve this equity through delivery structures with massive disparities in resources. It, therefore, underlines the need to review the capacity and resources of delivery structures to attain at least a minimal level of standards.

1.2 Objectives of the National Curriculum Framework

NCF 2026 provides the direction for curriculum development in Pakistan by outlining a coherent approach to the design and implementation of the scheme of studies and curricula across all stages of education. It seeks to respond to key challenges in the education system, including learning gaps, variations in access and quality, and the need to balance national coherence with contextual diversity. The Framework sets out a shared vision, guiding principles, and structural considerations to support the development of curricula that are relevant, inclusive, and aligned with the developmental needs of learners while enabling them to build the knowledge, skills, values, and competencies needed for meaningful participation in society and a changing world. The NCF aims to:

- i) Define the purpose and goals of education by articulating a clear and shared vision that reflects Islamic principles, national priorities, constitutional provisions and the aspirations of a diverse society as enshrined in the Constitution of the Islamic Republic of Pakistan.
- ii) Promote values and character development through the integration of ethical, moral, civic and spiritual dimensions of learning to nurture responsible, empathetic and socially conscious individuals.
- iii) Establish coherent and developmentally aligned progression by providing a structured and stage-wise approach to learning that aligns with the developmental needs of learners and enables continuity across all levels of education.
- iv) Guide curriculum design and content selection by establishment of principles and criteria for selection, organisation of content to ensure relevance, conceptual clarity, and manageable learning load.

- v) Promote equity and inclusion in the curriculum design to address diverse learner needs, reduce disparities and provide equitable access to meaningful learning opportunities.
- vi) Guide pedagogical approaches and practices through promotion of learner-centred, inquiry-based and experiential approaches that foster critical thinking, problem-solving creativity and application of knowledge.
- vii) Provide direction for language development and multilingual competence that builds linguistic skills through the use of familiar languages in early learning and the progressive acquisition of additional languages to reach the requisite level of proficiency in all.
- viii) Enable approaches of integration of themes and competencies in Science, Technology, Engineering, Arts, and Mathematics (STEAM), to support enhanced comprehension of the learner and eliminate redundancies.
- ix) Embed 21st century skills, climate change awareness, environmental conservation, civics, global citizenship, digital literacy, health and wellbeing, and life skills across subjects.
- x) Provide guidance for key components of curriculum implementation that include textbook development, assessment design and teacher capacity development, to support effective translation of curriculum into classroom practice.
- xi) Promote alignment across curriculum, teaching and assessment by strengthening monitoring and feedback mechanisms to inform continuous enhancement of coherence and coordination between curriculum design and classroom practice.

1.3 Core-Plus Principle

The Core-Plus principle provides a balanced framework to ensure national coherence alongside flexibility in curriculum development, allowing adaptation to diverse contextual realities across provinces, regions, and school systems. It recognizes that while provinces have constitutional autonomy over education following the 18th Amendment, there remains a shared national responsibility to guarantee minimum standards of quality, equity, and comparability of learning outcomes across the country.

Under this approach, the “Core” represents a set of nationally agreed minimum standards, including essential competencies, key learning outcomes, and foundational knowledge that all

learners across public, private, madrassa, non-formal, and special education systems are entitled to achieve. The Core also ensures alignment with constitutional values, national identity, and international commitments, while supporting learner mobility and maintaining consistency in educational quality across provinces.

The “Plus” component allows provinces and regions to contextualize and enrich the curriculum in accordance with their linguistic, cultural, socio-economic, and regional priorities. This entails the inclusion of local history, indigenous knowledge, regional languages, livelihood skills, and context-specific content. It also lends itself to adaptations for Non-Formal Education (NFE) and special education settings. The Plus component enables innovation, responsiveness, and relevance, ensuring that the curriculum reflects the diversity of Pakistan while remaining meaningful to learners’ lived experiences.

Importantly, the Core-Plus principle also supports differentiated pathways and flexible delivery mechanisms for various education systems (including madrassas), based on resources, objectives, comparative advantages of the learners, and their needs.

In essence, the Core-Plus principle operationalizes the vision of a unifying yet flexible curriculum framework, enabling Pakistan’s education system to uphold national cohesion while embracing diversity, inclusion, and innovation in a devolved governance structure and multiple schooling systems. It is a learner-centred approach that follows the adage of “meet the learner where they are” and guides them through a learner-centred flexible path toward competencies that provide all children the opportunities to compete for positions in quality higher education institutions, achieve social mobility, and enjoy freedom of choice in work options and life.

1.4 NCF in the Federal Structure

Within the post-18th Amendment context, the NCF serves as a cornerstone for coherence, equity, and innovation in Pakistan’s education system. It provides a common vision while ensuring alignment across curriculum, pedagogy, assessment, and teacher development, consistent with its guiding principles.

It functions as:

- a national reference framework defining shared competencies and standards,
- a unifying instrument ensuring minimum learning expectations,
- a flexible policy guide enabling contextual adaptation, and
- a coordination platform for collaboration, knowledge sharing, and continuous improvement.

SECTION 1

Context and Challenges

2 Background and Context

Pakistan's education system operates within a complex and diverse landscape shaped by socio-economic disparities, multilingual contexts, and uneven access to quality education. Despite sustained efforts, weaknesses persist. These include learning deficits, a high number of out-of-school children, disparities in educational quality caused by (among others) shortages of trained teachers, infrastructure constraints, and inconsistencies in curriculum implementation and assessment practices.

The pace of progress in education has been slower than the aspirations of various education policies, plans, and curricula prepared over the years. This underlines the need to deviate from the approaches of the past that have paid limited dividends. The NCF 2026 cannot solve every problem in the education sector, but within this constraint, the Framework builds on the lessons learned from past reform efforts, especially the curricula, that were not fully responsive to the diverse realities, contexts, and developmental needs of learners in Pakistan. This is where the core of the challenge lies.

2.1 The Education Landscape

Pakistan's education delivery is through multiple school systems. These can be differentiated based on ownership, objectives, resources, and curricular paths employed. The largest single set consists of schools run by the provincial and area departments of education. These include schools run directly by the departments and others managed through Public-Private Partnerships (PPPs). Privately owned and managed schools form the second largest (and by some estimates the largest) group of institutions. Although a limited number of non-government-owned elite schools functioned right from the years prior to independence, the growth of these schools can be traced to the 1990s. The numbers have grown exponentially in the last four decades.

The quality of learning in these institutions depends on the resources available based on the fee structure. At the top are the "elite private schools." These are high-resource institutions that use English as the medium of instruction. Learners in these schools develop very advanced proficiency in the English language through a combination of teaching resources available and household support compatible with the learning path of the curricula employed and content used. Given the high fee charged, elite private schools are accessible only to households that can afford the costs. The remaining private schools also profess to teach in the English medium,

but the actual outcomes, when compared with their objectives, reflect results that are not different from public sector schools. These are categorized as low-cost private schools.

Within both the public and private sectors are schools for children with disabilities (CWD), categorized as special schools. These are limited in number and serve only a small percentage of children with disabilities. Policies of inclusion of children with disabilities in regular schools through mainstreaming have had limited success.

Madrassas, as the traditional schools for the education of Muslim students in the subcontinent and other parts of the world, have a wide presence in Pakistan. These institutions were historically providers of administrators to the rulers and scholars for the performance of important religious duties for the court, which included interpretation of sharia law. The arrival of the British marginalized the madrassas. The education offered by these institutions became less relevant to the official work of the government and the market. Despite this diminished relevance to the market, madrassas continued to operate and expand.

After the creation of Pakistan, these institutions have expanded, especially from the 1980s onwards. Similar to private schools, madrassas are a diverse set of institutions. These are divided according to various schools of thought in Islam. The curricula taught in each stream are designed accordingly. The status of these institutions also varies according to resources and quality of learning. The largest numbers, similar to private schools, are under-resourced and cater to the poorest sections of society.

Education policies from 1947 onwards have included madrassas as important contributors to the sector. The primary objective of these policies has been to align the learning pathways of these institutions with the national curriculum through various mainstreaming approaches. The purpose has been to provide children in madrassas with equal opportunities for employment and in life.

Outside these formal school systems is the non-formal education stream. It consists of institutions designed to fast-track the learning of out-of-school children who cannot be admitted at the grade level appropriate to their age. Compressed curricula packages are used in teaching and learning. Given the high number of out-of-school children in Pakistan, the importance of the NFE stream cannot be overestimated.

The NCF 2026, in its Core-Plus principle, includes all of the above through a flexible approach that provides every child, irrespective of the type of education institution in which the child is enrolled, with opportunities to learn through a quality education structure.

2.2 The Need for Revision of NCF 2017

The need for revision of the National Curriculum Framework 2017 was derived from the diagnosis of implementation of the current curriculum conducted by the National Curriculum Council Wing (NCCW). The diagnosis was prompted by the situation described in the previous section and feedback from multiple sources (parents, teachers, examination bodies). NCCW diagnosed the problems in the design and implementation of the extant curriculum in detail, through a structured process. The Wing initiated a series of policy dialogues with provinces in 2025 to review implementation progress and emerging challenges. Feedback from these consultations repeatedly identified curriculum overload as a major barrier to effective teaching and learning. The overload, beginning in early years and driven by excessive and overlapping content, rapid pacing, and insufficient prioritization, emerged as a major barrier to effective learning.

The findings were elaborated and reinforced in the National Curriculum Summit (NCS) 2026 held in Islamabad on February 11th and 12th. Education specialists from across Pakistan attended the Summit. Their collective findings not only supported the findings of the earlier diagnosis but also identified additional context and guidelines for the next steps.

The Summit also concluded that the gaps in curriculum design are accentuated by, among others, below-par quality of textbooks, teacher shortages, limited professional development opportunities for teachers, major infrastructure gaps, and digital inequities.

The analysis further highlighted institutional bottlenecks and the absence of mechanisms for systems to learn and adapt, which leads to persistent misalignment across curriculum, textbooks, teacher preparation, and assessment systems.

The need for a nationally aligned framework that ensures minimum standards of quality, coherence, and equity, while allowing flexibility for contextual adaptation, was a key lesson learned from the diagnostic process, including the National Curriculum Summit 2026. The NCF, therefore, provides a shared vision and strategic direction for national progress in education within the federal structure laid out in the Constitution.

The decision to revise the National Curriculum Framework 2017 (a significant pioneering document) was also necessitated by important shifts in both national and global educational landscapes. The Framework is, therefore, further shaped by emerging national and global imperatives. These include rapid technological advancement, especially the rise of artificial intelligence, climate change, and the demands of constructing a knowledge economy. These developments require an education system that is adaptive, resilient, and future-ready.

In sum, NCF 2026 has been developed as a revised and future-oriented framework that builds on the strengths of its predecessor and fills gaps unaddressed in the past. The learning gained over the last nine years and the changes since have aided value addition. The Framework, informed by extensive consultations with provinces, areas, and key stakeholders, introduces a developmentally aligned stage-wise structure, strengthened coherence across levels, and a focused approach to curriculum development and review process to enhance relevance and manageability. The NCF guides curriculum developers on the cross-cutting issues of technology integration, inclusion and equity, climate resilience, and child-centred language use and learning pathways. The Framework is cognisant of the needs of an age-appropriate design and learning from international research. The latter is specifically important in the nascent area of integration of artificial intelligence into learning.

2.3 The Federal-Provincial Context

The curriculum has been nationally determined for most of Pakistan's history. Curriculum governance was strengthened after independence through the establishment of key institutions, including the National Bureau of Curriculum and Textbooks, the provincial bureaus of curriculum, and the provincial textbook boards. These introduced a more structured and coordinated approach to curriculum development, textbook production, and quality assurance.

The first Pakistan Educational Conference (1947) laid the foundational vision for aligning education with national ideology, moral and character development, and the socio-economic needs of the newly established state. Building on this vision, subsequent reform initiatives; most notably the National Education Commission (1959), emphasized the development of foundational skills, the promotion of patriotism and national unity, and the alignment of curriculum with Pakistan's evolving social and economic priorities. Collectively, these early efforts established curriculum as a strategic instrument for nation-building and human development, shaping the trajectory of education policy in the decades that followed.

Between 1972 and 2009, successive national education policies focused on nationalization, modernization, Islamization, diversification, and greater harmonization across public and private education systems.

The Constitution of Pakistan (1973) placed education on the Concurrent Legislative List, which gave the federal government primacy over the areas of policy, planning, curriculum, and Islamic education without removing these subjects from provincial purview. Later, the Federal Supervision of Curricula, Textbooks and Maintenance of Standards of Education Act, 1976, gave the federal government autonomy over curriculum development, approval of textbooks, and national education standards. This legal instrument provided the framework for federal-provincial coherence in the management of education standards through national curriculum development and the textbook approval process. In 2010, the Concurrent List was abolished as a result of the 18th Constitutional Amendment. This devolved all the above subjects exclusively to the provinces. The federal government had no official role in any aspect of education outside territories directly under its administrative control except international reporting of data and the functioning of the Inter-Board Coordination Commission. The exceptions were higher and technical education, where a role in national management was retained with the Federal government under entry 12 of the Federal Legislative List Part II, as follows:

"Standards in institutions for higher education and research, scientific and technical institutions"

The 18th Constitutional Amendment was a response by the Parliament to the promise of provincial autonomy embedded in the Constitution itself. It provided the space for provinces to pursue more context-specific approaches to educational development. However, the need for national coordination and coherence in education began to be recognised early. This resulted in a number of national initiatives involving both the provinces and the federal government, aimed at facilitating standardized responses to educational challenges and supporting equity among provinces in outcomes. These responses included the Joint Declaration on Education 2011, by the elected leaders of the Government of Pakistan and the provincial governments, including AJ&K and G.B. This declaration, inter alia, adopted the National Education Policy 2009 as a national document and renewed the national dialogue on the need for greater curriculum coherence and coordination across all streams of education. Furthermore, the provinces and the federal government strengthened collaborative mechanisms. The two most important forums used as platforms for consensus-building and coordination were, and continue to be, the Inter-Provincial Education Ministers' Conference (IPEMC) and the NCCW. Key outcomes were the Minimum Standards for Quality Education (MSQE) 2016, the National Curriculum Framework (NCF) 2017, and the subsequent development of the Single National

Curriculum (SNC) under the stewardship of the NCCW, with the objective of establishing minimum common learning standards across public and private schools and madrassas. All these documents had the voluntary inclusion and assent of the provinces and, therefore, applied nationally. The National Education Policy Development Framework (NEPDF) 2024 was also formulated as a guide to development of standardized approaches to policy within the structure of the Federation as defined by the Constitution.

The SNC initiative was subsequently reframed as the National Curriculum of Pakistan (NCP), 2022-23. While it was developed with the judicious intent of eliminating inequities across education systems, the design of the curriculum was not aligned with ground realities. The inability to contextualize the diversity of learner needs, which is essential to the design of any educational pathway that purports to move toward equity, was a key reason for implementation challenges. The overload of expectations, as manifested through the benchmarks and Student Learning Outcomes (SLOs) in the curriculum, further compounded the difficulties faced by teachers and learners.

The present revision of the NCF builds on the historical trajectory of national curriculum development and education policies, with greater weight given to lessons learned from more recent experiences. As a public policy document, the NCF establishes the foundation for coordinated action among federal and provincial stakeholders including curriculum authorities, examination bodies, various schooling systems, teacher education institutions, and communities.

3 The Challenges in Education

Curricula cannot be developed in a vacuum. Recognition of the limitations and realities of systems, societies, and other contextual realities is essential for the preparation of realistic learning designs and effective implementation. The need to highlight ground realities in the NCF stems from two reasons. First, to create awareness among curriculum and content developers of the importance of context when they design learning pathways and expectations. Second, to emphasise that educational outcomes cannot be significantly improved by curricula alone. A whole-of-system approach, focused on the implementation of the curriculum, is required.

3.1 Challenges for Curriculum Design and Implementation

As demonstrated in the previous chapter, the development and implementation of the curriculum face a multitude of challenges. These include deficiencies in the legacy structures that manage education, the need to engage with changes that have arisen in the modern world (both as challenges and opportunities) and to decisively place the country on the path to universal school completion and quality education for all children. How can this be achieved in an education system with endemic governance and implementation weaknesses that have resulted in low performance for the vast majority of children? This question is valid for the overwhelming majority of school-age children, both within and outside the school system.

The landscape of education explained in Chapter 2 shows that schooling is fragmented into multiple levels in terms of performance, resources, and outcomes. At one end are under-resourced schools that cannot meet the requirements of modern education. At the other end are well-endowed elite private schools, whose students can compete at the global level. Only a small number of schools run by public sector entities have the capacity to match the learning outcomes of these private sector elite schools. The majority range between the low-end schools, which struggle with anachronisms such as single or two teachers for all primary classes, and the high-end schools described above. A majority of schools congregate toward the low end in terms of performance, even if their resource situation is better. These comprise the bulk of public sector schools and the low-cost private schools.

The primary purpose of all education policies, including the NCF, is to guide a path that will remove these disparities and bring all learners toward a standardized outcome aligned with the needs of today's world and the future. This is not easy. The process requires recognition of

these challenges, their redressal, and the development of a path for all learners that converges into equal opportunities for every child.

Some of the key issues most relevant to this challenge are listed below. These include the substantive challenges of poor resources and capacity at the delivery level. The NCF 2026 highlights them as realities that must inform a more grounded, equitable, and future-oriented curriculum design. It is imperative that the situation concomitantly produces a policy response from other relevant organizations to enhance implementation capacity.

The list does not exhaust the education problems and their causes in the country, but it addresses the issues most proximate to the needs of developing a realistic, yet forward-looking, NCF for Pakistan. The five areas that need the most attention for improved curriculum design and implementation are:

- i) Low levels of learning in schools and out-of-school children (OOSC).
- ii) School readiness on scale and accommodation of diversity.
- iii) System capacity challenges across the value chain from curriculum design to implementation in schools.
- iv) Designing curricula for technology integration and climate change, and implementing them.
- v) Capacity for a feedback cycle and continuous improvements.

3.1.1 Learning Deficits and Out of School Children (OOSC)

The context of the performance of the current system is defined by 25 million out-of-school children (OOSC) and a learning poverty rate (the inability of a child to read and understand a simple age-appropriate text by age 10) of 77 percent (World Bank, 2022). In the current situation, a majority of children in schools fail to develop even the foundational competencies required. One of the most significant net effects is a literacy rate of only 61%. The implications for expectations of curriculum design are profound, as low education attainment on a large scale exposes the limitations of household and community support for learning outside schools.

Within this reality, the central challenge is to ensure that all children learn at an age-appropriate level, making schooling a worthwhile experience that will eventually eliminate learning deficits and ensure school completion for all children. Equally important is the challenge of addressing the educational needs of children of different ages who are out of school. The sequentially designed, age-appropriate structure of formal schools cannot accommodate these children. A

strengthened and robust non-formal education (NFE) system that can include these children is an essential component of education delivery structures. While NFE programmes in the country have expanded, they remain far below the requirements.

3.1.2 Diversity and Scale

When the British left, the areas that constitute present-day Pakistan had a literacy rate of 11%. There were only a handful of institutions of higher education, along with 8,413 primary schools, 2,190 middle schools, 408 secondary schools, and 40 higher secondary schools. These numbers represent a fraction of the current figures: 158,713 primary schools, 44,426 middle schools, 44,942 secondary schools, and 11,258 higher secondary schools (including higher secondary classes in colleges). Total enrollment has expanded from 297,000 in 1947 to 19 million in 2024. These numbers include all government schools and private schools registered with provincial and federal authorities.

The population has grown from 33.7 million (for what was then West Pakistan) to 250 million. The education delivery structures, still rooted in the colonial past, have been overwhelmed by this growth.

Systems, governance structures, and capacities have not adjusted commensurately to the scale of the challenge. The persistent result has been the country's inability to meet its educational objectives, including those aspired to by multiple curricula since independence. The commitment made in Pakistan's very first National Education Conference in 1947 (and now a substantive part of the Constitution) to provide quality education to all children remains elusive.

The challenge of scale is further accentuated by diversity, which continues to add new dimensions in a multilingual and multicultural federation. Linguistic diversity is the most significant challenge for curriculum developers. An exponential multiplier of this difficulty is uneven development. This means that households do not have the capacity to support a curriculum that is not aligned with their linguistic endowments.

High levels of poverty also alter other realities of a household and the capacity of the home environment to support the expectations of a curriculum that does not account for these limitations. Households with low levels of literacy (or education) in both urban and rural areas mean that children lack access to learning materials, parental engagement, and digital resources. The digital divide is wide, growing, and skewed.

3.1.3 System Capacity

Capacity needs of an education system can be categorised into governance and delivery structures that require human resources on a scale, and processes where even a limited number of high-level capacity individuals can influence results. The former are the delivery and monitoring systems that include teachers, head teachers, and local education officers responsible for academic and other tasks. The latter include expertise in curriculum and textbook development, research, assessment, and other similar processes. Capacity deficits exist in both categories with implications for design and implementation of curricula.

Implementation Structures at Decentralised Levels

Effective implementation of the curriculum at scale is heavily dependent on the capacity of teachers, head teachers, and local education officers to translate the expectations of the curriculum into learning outcomes. Many primary schools operate in multi-grade situations. A large percentage have either one or two teachers. In at least two provinces, the share of such schools at the primary level exceeds 75%. This is not tenable. Nor is the reality of the shortage of subject specialists in post-primary classes.

Primary schools in the public sector (with an insignificant number of exceptions) function without head teachers. This represents another critical vacuum. Even where head teachers are posted, their capacity to support the teaching and learning process is limited. They are mostly engaged in administrative matters.

Local education officers (at the district level and below) also do not prioritize academic support to schools. They are overwhelmed by the administrative requirements of a much higher number of schools and teachers than their offices' capacity can handle. These offices have not transitioned to meet the needs of an exponentially larger scale. System efficiency has been addressed by governments through centrally operated organizations that use high levels of digitization to monitor schools. At best, these systems can check for inputs. Effective support for teaching and learning, or for the implementation of the curriculum, can best be provided through the availability of an adequate number of teachers, capacitated and effective head teachers, and supportive supervision at the local level.

The curriculum design has to consider capacity limitations, along with the child's context, in its expectations of delivery. There are, however, limits to which the design can accommodate

capacity weaknesses. Curriculum design cannot be extensively diluted to suit the capacity of schools and the overall education delivery systems.

Capacity for Curriculum Design, Textbook Development and Assessments

Quality of delivery is also dependent on the capacity of professionals working on products and processes such as curriculum, textbooks, and assessments. The importance of these competencies cannot be overestimated in an education structure with low teacher competency (on a large scale). The number of quality specialists in these high-value areas is limited.

The human resources needed for the development of quality products and processes - such as curricula, textbooks, and assessments - depend on the strength (and scale) of academic courses in pre-service teacher education and beyond, extending into postgraduate specialisations in the field of education. The number of universities that offer specialisation in these areas, as well as the incentives for individuals to specialise, are limited.

This limitation is further exposed during curriculum development. The range of capacities required for the task is not found within a single specialisation. Effective curriculum design requires collaboration among subject experts, pedagogical specialists, assessment experts, and those with an understanding of learner development across stages. In practice, these capacities are often unevenly available. An important area of focus is the integration of subject knowledge with age-appropriate curriculum design. This becomes particularly relevant at post-primary levels, where a greater emphasis on subject specialisation can sometimes make it more difficult to maintain a strong alignment with developmental needs. Gaps due to non-availability of the relevant combination of expertise are often encountered. This deficit is accentuated by the low capacity of the government sector to remunerate experts in more complex areas such as sciences, technology, health and nutrition, and climate, where human resources are costly.

Capacity for Feedback and Review

Curricula work through feedback cycles. These cycles are either missing or poorly implemented. In practice, the implementation cycle begins and ends with the development of textbooks. Issues in design and delivery are never analysed as part of an institutionalised feedback process - one that should begin with textbook preparation and continue into classroom practices, including assessment.

Objective feedback is further diminished by the limited research on the official curriculum. Even this limited research is not connected to the review of curriculum policies. This means

that once a curriculum is approved, its de facto status remains unchallenged by any systematic process. As a result, there is an excessive focus on teacher capacity (which may not be the primary cause of poor learning outcomes) and other areas, while the curriculum itself and its products - such as textbooks - are rarely re-examined.

The recent review by the NCCW was prompted by criticism of the previous secondary and higher secondary curriculum from students, parents, and teachers. This criticism emerged organically, driven primarily by the difficulty levels of the courses and their consequences for the careers of students sitting for high-stakes examinations. The NCCW responded by conducting a detailed review of the curriculum, structuring the diagnosis into feedback through questionnaires administered to provincial stakeholders, consultations in the provinces, and the National Curriculum Summit (NCS) 2026. This helped identify the problems in curriculum design and implementation across all grades.

However, this process was a one-time response. It does not constitute an institutionalised feedback mechanism; had such a mechanism already been in place, the separate exercise conducted by the NCCW would not have been necessary. Therefore, in Chapter 10, the NCF recommends institutionalised periodic curriculum review, textbook analysis, assessment feedback, classroom evidence, and stakeholder consultation as part of a continuous improvement cycle.

3.1.4 The 21st Century Challenges

A low-performing education system means that Pakistan lags behind the world in sciences, technology, social sciences, and many other areas relevant to an integrated global economy driven by innovation and the ever-changing needs of livelihood and the requirements for a good quality of life. Two global shifts have had the most momentous impact: digital technology has evolved into generative artificial intelligence (AI), and there has been a steady increase in climate stress and its implications. These changes create an ongoing need for policy adjustments in all spheres of government. A country's ability to successfully navigate these changes and avoid being left behind depends heavily on an education system that understands and addresses these dynamic contemporary needs. It is important to focus on a core set of competencies that enable lifelong skill development and employability within an ever-changing market driven by both of the factors mentioned above. Systemic capacity - from curriculum development to school preparedness - is required to effectively mitigate the challenges and seize the opportunities of the 21st century.

Technology and Artificial Intelligence (AI)

The source of the most rapid changes in lives and sources of livelihood in the last few years has been technological change in the digital world, which has progressed from supportive software to generative Artificial Intelligence (AI). The pace of progress has challenged the ability of education policy (including curricula) to adjust to the needs of new drivers of economic growth and sources of livelihood, and this pattern is expected to continue. Resources and expertise are required not only to recognize contemporary needs but also to possess the prescience to assess future requirements. The challenge grows exponentially in low-resource education systems. Evolution of education to prepare children for an AI-centric world presents the steepest slope for system and school preparedness.

The challenge for curriculum developers is twofold: the inclusion of technology as an area of learning and its use in the teaching-learning process. Both have implications for curriculum design. Research on the use of digital means in learning is only now producing some actionable results, and countries are trying to wean younger children away from screens and back toward pencil and paper. The consequences (intended and unintended) of the use of AI in learning remain, at best, unclear. Curriculum developers face the predicament of determining the right stage for introducing digital learning and human centric use of AI at the relevant level of schooling. The absence of conclusive research findings compounds the challenge.

The limitation of available expertise is greatest in this evolving area. There is no expertise that combines an understanding of AI with the learning sciences that can be applied in the context of Pakistan.

Climate Change and its Consequences

Climate change impinges on all aspects of life. Its ramifications include changes in agricultural production methods, technological shifts in industry, population displacements, reviews of infrastructure standards, and much more. Policy responses that help prepare individuals, communities, and countries to adapt, mitigate its impact, and build resilience will determine the quality of life and the sustainability of livelihoods.

As a country that ranks among the top ten most impacted by climate change, Pakistan's curriculum needs to respond to the new scenarios expected from the global and local effects of the Earth's shifting environmental state. The topics to be covered range from the scientific basis

of the phenomenon to its implications for lives and livelihoods. The curriculum cannot simply identify problems; it must extend into climate action. While Pakistan has included climate change and its ramifications in past curricula, the impact of this inclusion remains unsatisfactory. The key questions are:

- i) Which aspects of climate change should be included?
- ii) How should the balance between global and local implications and responses to climate change be struck?
- iii) Should climate change be included in a separate course or embedded into all subjects across all grades?

It is imperative to review the entire design for more effective inclusion and need-based education outcomes. The NCF responds to the above questions in more detail below, especially in Chapter 4. Even if the above questions are answered effectively by the curriculum, implementation challenges will remain. The present school system, much like its capacity for integration of technology, is underprepared to teach climate change-related topics effectively.

SECTION 2

The Core Framework

4 Vision, Education Philosophy and Guiding Principles

The Constitution of the Islamic Republic of Pakistan, 1973, declares education as a fundamental right of every child between the ages of 5 and 16. The Constitution also emphasizes equity in educational opportunities, safeguards against discrimination, gender inclusion, and Islamic values, in specific, the overarching vision provided by Article 2A. All of which provide the normative foundation for curriculum development under the NCF.

Safeguards as to educational institutions in respect of religion, etc.

Article 22(1): No person attending any educational institution shall be required to receive religious instruction, or take part in any religious ceremony, or attend religious worship, if such instruction, ceremony or worship, relates to a religion other than his own.

Right to education

Article 25-A: The State shall provide free and compulsory education to all children of the age of five to sixteen years in such manner as may be determined by law.

Preservation of language, script and culture

Article 28: Subject to Article 251 any section of citizens having a distinct language, script or culture, shall have the right to preserve and promote the same and subject to law, establish institutions for that purpose.

Islamic way of life

Article 31(2): The State shall endeavor, as respects the Muslims of Pakistan, —

- (a) to make the teaching of the Holy Quran and Islamiat compulsory, to encourage and facilitate the learning of Arabic language and to secure correct and exact printing and publishing of the Holy Quran;
- (b) to promote unity and the observance of the Islamic moral standards.

Parochial and other similar prejudices to be discouraged

Article 33: The State shall discourage parochial, racial, tribal sectarian and provincial prejudices among the citizens.

Full participation of women in national life

Article 34: Steps shall be taken to ensure full participation of women in all spheres of national life.

Protection of minorities

Article 36: The State shall safeguard the legitimate rights and interests of minorities, including their due representation in the Federal and Provincial services.

Promotion of social justice and eradication of social evils

Article 37: The State shall—

- (a) promote, with special care, the educational and economic interests of backward classes or areas;
- (b) remove illiteracy and provide free and compulsory secondary education within minimum possible period;
- (c) make technical and professional education generally available and higher education equally accessible to all on the basis of merit;
- (f) enable the people of different areas, through education, training, agricultural and industrial development and other methods, to participate fully in all forms of national activities, including employment in the service of Pakistan

Promotion of social and economic well-being of the people

Article 38: The State shall—

- (d) provide basic necessities of life, such as food, clothing, housing, education and medical relief, for all such citizens, irrespective of sex, caste, creed or race, as are permanently or temporarily unable to earn their livelihood on account of infirmity, sickness or unemployment

National language

Article 251: (1) The National language of Pakistan is Urdu, and arrangements shall be made for its being used for official and other purposes within fifteen years from the commencing day.

(2) Subject to clause (1), the English language may be used for official purposes until arrangements are made for its replacement by Urdu.

(3) Without prejudice to the status of the National language, a Provincial Assembly may by law prescribe measures for the teaching, promotion and use of a provincial language in addition to the national language.

In light of the Constitutional provisions outlined above, the NCF affirms the following national core values, rooted in Islamic ethical principles and universally shared human values, which will underpin all areas of learning:

- i) Justice (Adl), fairness, and equity

- ii) Honesty, integrity, and truthfulness
- iii) Respect for human dignity and fundamental rights
- iv) Tolerance, coexistence, and celebration of diversity
- v) Accountability and responsibility in individual and collective conduct
- vi) Compassion, empathy, and social responsibility
- vii) Pursuit of knowledge (Ilm) and intellectual curiosity
- viii) Moderation, balance, and rejection of extremism
- ix) Civic responsibility and commitment to public welfare
- x) Respect for law, ethical governance, and social order
- xi) Environmental stewardship and sustainability

These values will be embedded across curricular content, instructional practices, and assessment frameworks to ensure balanced intellectual development, ethical orientation, and societal engagement.

The curriculum will emphasize higher-order competencies to equip learners with the knowledge, skills, and dispositions required to navigate uncertainty, engage responsibly with emerging technologies, and make informed decisions in complex personal, professional, and civic contexts.

4.1 Vision

To cultivate inclusive, ethical, creative, and future-ready learners through a unifying national curriculum that promote celebration diversity within a common Pakistani identity that fosters critical thinking, key competencies, Islamic values and global citizenship, enabling all learners in Pakistan to contribute to national development.

4.2 Mission

To achieve this vision, the NCF will:

- i) Follow the guiding principles of Islam as articulated in the Holy Quran and Sunnah, Pakistan's ideological and constitutional foundations and the vision laid down by Quaid-e-Azam and Allama Iqbal for a just, progressive and inclusive society.
- ii) Provide a coherent, competency-based, inclusive and culturally relevant curriculum that ensures achievement of equitable learning standards for all children and is applicable to the multiple contexts of learners across all education systems.

- iii) Promote holistic development (ethical, intellectual, social, moral, emotional, and physical) of every learner to become part of a society that celebrates diversity and peaceful coexistence as core values.
- iv) Integrate contemporary knowledge, technology, and 21st-century skills through a well-researched and deliberate process while ensuring adherence to Pakistan's contextual realities and values.

4.3 Educational Philosophy of NCF

The educational philosophy of the NCF 2026 is grounded in a holistic understanding of human development getting aspiration from Quran and Sunnah, which not only lay the ethical basis of teaching and learning but also direct search of self and the facts of the universe. NCF espouses an education that imparts to learners the universal values of human rights and dignity, and a celebration of diversity. It also aims to inculcate in learners the ability to inquire, analyse, evaluate, and solve problems in an increasingly complex world.

The Framework prioritizes focus, coherence, and depth of learning over breadth, guaranteeing that curriculum expectations are realistic, teachable, and aligned with classroom realities. This will facilitate the development of self-directed learners and wean the teaching and learning process away from rote memorization.

It also emphasizes the gradual development of learner agency and self-determination, ensuring that learners particularly at secondary and higher secondary levels become increasingly capable of directing their own learning and personal growth.

The philosophy promotes a Pakistani identity within the diversity of its various cultures. This identity has been shaped from the time and rationale of the freedom struggle to the values that have emerged through the development of the constitutional framework, successive education reforms, and the growing imperatives and objectives of Pakistan as a state. This historical trajectory, which begins with the Pakistan Movement based on the Two Nation Theory, underscores the role of education in cultivation of national identity, social cohesion, and collective progress.

At the core of this identity and its values are the vision articulated by Quaid-e-Azam Muhammad Ali Jinnah on citizenship, the rule of law, and social justice, together with the ideas of Allama Muhammad Iqbal emphasizing self-awareness, purposeful action, and moral

courage. These continue to provide enduring intellectual and ethical direction for education, and in particular, for curriculum development in Pakistan.

4.4 Curriculum Design Models

Curriculum design models provide the framework for organizing and structuring the curriculum. They guide decisions regarding the arrangement, focus, sequencing, and integration of content, learning experiences, and competencies within the curriculum. In this sense, curriculum design may be viewed as the architecture of the curriculum, determining how knowledge, skills, values, and learning experiences are systematically organized to achieve educational goals. Most curriculum designs are broadly derived from three major approaches: subject-centred designs, learner-centred designs, and problem-centred designs.

4.4.1 Subject-Centred Design

Subject-centred design is one of the oldest and most widely practiced curriculum designs. It organizes the curriculum around separate disciplines and subjects such as mathematics, geography, history, and science. In this design, knowledge and content are considered central components of the curriculum, with emphasis placed on the systematic transmission of subject matter. The teacher assumes an active instructional role, while lecture, recitation, and large-group discussion remain common pedagogical approaches. Subject-centred design is particularly suitable for systems with centralized curricula as it facilitates curriculum planning, establishes minimum standards of performance and achievement, and enables the development of standardized textbooks and instructional resources. However, this design may lead to fragmentation of knowledge and may place limited emphasis on the learner's interests, experiences, and holistic development. Excessive focus on subject matter may also reduce opportunities for social, emotional, psychological, and physical development.

An important variation of subject-centred design is the broad fields design, which seeks to integrate related disciplines into broader learning areas. Under this approach, subjects that share conceptual relationships are grouped together to provide learners with a more connected and meaningful understanding of knowledge. For example, geography, economics, political science, sociology, anthropology, and history may be integrated into Social Sciences, while language-related disciplines may be combined within Language Arts. Similarly, biology, chemistry, and physics may be organized under General Sciences. Broad fields design promotes interdisciplinary learning and enables learners to recognize relationships among

concepts and themes across disciplines. Contemporary approaches such as STEAM education reflect this integrative orientation. The design encourages thematic and connected learning; however, it also presents challenges related to balancing breadth and depth of content coverage across integrated themes and disciplines.

4.4.2 Learner-Centred Design

Learner-centred design places the learner at the centre of the educational process. It emphasizes the needs, interests, developmental stages, experiences, and abilities of learners in the selection and organization of content and learning experiences. This design is particularly common in early and elementary education where emphasis is placed on the development of the whole child. Learner-centred approaches promote active participation, personalization, flexibility, inquiry, and adaptive learning pathways that allow learners to influence and co-construct aspects of their learning experiences. Such approaches enhance the relevance of education to learners' lives and support the development of practical skills applicable beyond the classroom context. Nevertheless, learner-centred design may present challenges where learners' interests do not adequately correspond to essential knowledge domains and competencies. It may also require significant resources, teacher capacity, and flexible systems to ensure effective implementation. Furthermore, extensive emphasis on learner interests may sometimes limit comprehensive coverage of disciplinary content.

4.4.3 Problem-Centred Design

Problem-centred design organizes learning around real-life problems, societal challenges, and authentic situations that require inquiry, collaboration, and problem-solving. In this design, learning is driven by complex and meaningful problems rather than the prior delivery of isolated subject content. Knowledge, skills, and competencies emerge through the process of investigating and addressing issues relevant to learners and society. Such designs often cut across subject boundaries and encourage interdisciplinary learning. Problem-centred approaches may focus on contemporary social issues, community needs, citizenship, environmental concerns, or broader processes of social improvement and reconstruction. By linking learning to real-world contexts, the design promotes critical thinking, collaboration, creativity, and application of knowledge.

A related approach within problem-centred design is the life-situations design, influenced by Herbert Spencer's concept of education for complete living. This approach organizes learning

around everyday life situations and practical human concerns, including health, family, community, citizenship, social relationships, environmental sustainability, and personal well-being. It emphasizes learning experiences that sustain and enhance life, support responsible social participation, and develop the capacity to respond effectively to real-life challenges. The life-situations approach draws upon contemporary societal realities and promotes experiential learning, reflection, community engagement, and practical application of knowledge. Learners may engage in projects and activities addressing issues such as environmental protection, mental health awareness, social responsibility, and community development through interaction with real stakeholders and authentic contexts.

The National Curriculum Framework recognizes that no single curriculum design is sufficient to address the diverse educational needs of learners and society. Therefore, the framework promotes a balanced and integrated approach that draws upon the strengths of subject-centred, learner-centred, and problem-centred designs. Such an approach seeks to ensure conceptual rigor, interdisciplinary understanding, learner engagement, contextual relevance, competency development, and meaningful application of learning in personal, social, national, and global contexts.

4.5 Guiding Principles

The following principles will guide curriculum development and implementation across all federating units:

4.5.1 Ideological and Constitutional Alignment

Curriculum development will be guided by the Constitution of Pakistan and the principles of Islam, promoting moral integrity, social justice, harmony, inclusion, tolerance, peaceful coexistence, and respect for diversity, minority rights, and national cohesion.

4.5.2 Learner-Centred and Inclusive Orientation

The curriculum will place learners at the centre of design and implementation, reflecting their developmental stages, prior knowledge, interests, and diverse needs, including those in special education and non-formal education (NFE). Barriers related to language, disability, gender, geography, and socioeconomic status will be addressed to ensure equitable access, participation, and success for all learners.

4.5.3 Equity, Inclusion, and Equal Opportunity

The curriculum will promote fairness and social justice by ensuring meaningful learning opportunities for all learners, particularly marginalized and underserved groups, and by embedding inclusive content and pedagogical guidance across all learning areas.

4.5.4 Coherence, Focus, and Feasibility

Curriculum design will prioritize learning by avoiding redundancy and maintaining vertical and horizontal alignment across standards, pedagogy, and assessment. Expectations will remain feasible in relation to instructional time, teacher capacity, and a minimal resource requirement.

4.5.5 Relevance and Contextual Responsiveness

The curriculum will reflect Pakistan's diverse social, cultural, linguistic, and regional contexts while maintaining national coherence. Learning will connect with real-life situations and respond to emerging societal, environmental, and economic challenges. The real and continuous risks of the impact of climate change will be a cross-cutting priority.

4.5.6 Future Orientation

The curriculum will align with the national priorities articulated in Uraan Pakistan: National Economic Transformation Plan (2024–2029), which emphasizes a stronger correlation between education, skills development, digital transformation, and productivity-led growth, as well as the transition to a knowledge economy. This reinforces the need for future-oriented curricula that promote adaptability, innovation capacity, and workforce readiness.

4.5.7 Contemporary Competencies

The curriculum will develop transferable competencies, including critical thinking, problem solving, creativity, communication, collaboration, adaptability, digital literacy, ethical reasoning, peace education, global citizenship, health, and financial literacy. These will be meaningfully embedded across subjects and learning stages. It will prepare learners to navigate complexity, contribute to innovation, and respond effectively to 21st-century and future challenges.

4.5.8 Technology Integration and Resilience

The curriculum will integrate technology to enhance learning, innovation, and access, while promoting safe, ethical, and responsible use. As the world embraces the growth and use of artificial intelligence (AI), the importance of maintaining the primacy of human agency in its use is also highlighted as critical. AI is not merely about learning how to use it; it is important to use it for the development of the learner and within ethical boundaries that technology must not compromise. The curriculum will prepare learners for a future, AI-centric world, and in doing so, ensure that the use of artificial intelligence remains human-centric.

4.5.9 Integration of STEAM and Interdisciplinary Learning

The curriculum will promote interdisciplinary approaches, including the integration of STEAM, to strengthen problem-solving, design thinking, and the application of knowledge in real-world contexts.

4.5.10 Values, Ethics, and Citizenship

Ethical values, character development, and civic responsibility will be embedded across learning areas, to prepare responsible, productive, and socially engaged citizens.

4.5.11 Balanced and Inclusive Language Policy

The curriculum will support learner-centred multilingual education, prioritizing the mother tongue or familiar language in the early years, while ensuring the progressive development of national and international languages, including English, at the requisite level of proficiency.

5 Stages of Learning

The design of school stages within the NCF 2026 is guided by two fundamental principles:

- i) Alignment with child development trajectories
- ii) Progressive deepening of knowledge, skills, and dispositions across stages

Education is conceptualized not merely as the transmission of knowledge, but as the holistic development of the learner. It encompasses linguistic, cognitive, physical, socio-emotional, moral, and spiritual domains. The structuring of school stages reflects how children grow, learn, and engage with knowledge over time, ensuring coherence, progression, and equity in learning opportunities. While shaped by context, these domains follow broadly observable patterns that provide a basis for structuring educational experiences. Effective curriculum design, therefore, requires that expectations, content, pedagogy, and assessment are aligned with learners' developmental readiness. Many education systems increasingly view education as supporting the whole child. The following stage design is guided by the NEPDF, 2024, to permit developmental structuring of learning that is consistent with national education priorities and reform directions.

5.1 Learner Standards as the Foundation of Stage Design

Learner Standards are broad, competency-based statements that define what learners are expected to know, understand and be able to do across key stages of schooling. They articulate the essential capabilities that learners are expected to develop over time and serve as reference points for curriculum design, teaching and assessment. The organization of school stages in the NCF is anchored in a clearly defined set of Learner Standards, which articulate the competencies, values, and dispositions expected of all learners by the end of schooling. These standards provide a unifying vision for curriculum design and ensure that learning across all stages contributes toward common national goals while allowing for developmental progression.

5.2 Rationale for Learner Standards

Learner Standards provide clarity within the curriculum framework by defining clear expectations for learning. These standards support alignment between curriculum, pedagogy and assessment and promote consistency across subjects, grades and education system.

- i) Guide curriculum developers in structuring subject-specific learning outcomes and progression.
- ii) Support teachers in focusing on meaningful learning and reducing reliance on rote memorisation.
- iii) Enable monitoring of learning outcomes at the system level and inform continuous improvement.
- iv) Provide a basis for designing assessments that capture understanding, application and higher-order learning.

5.2.1 Learning Domains

The standards are organized around five learning domains that represent key dimensions of holistic learner growth. The sequence of domains for organizing the standards reflects a balanced view of learner development, while recognising that all domains are interconnected and develop together. The linguistic domain is placed first, as language supports learning and access to knowledge. The cognitive domain follows, as thinking and understanding build on language. The physical and motor domain is positioned next to highlight its foundational role in coordination, movement, and physical well-being, which support active engagement in learning. The socio-emotional domain focuses on relationships, well-being, and interaction with others, while the moral and spiritual domain builds on these to guide values and responsible participation in society. Stage-wise progression of Learner Standards is given at **Annex-I**.

Linguistic Domain

- i) Build foundational language and literacy skills, beginning in familiar language and progressing to additional languages, including listening, speaking, reading, and writing to support comprehension and expression across contexts.
- ii) Use language effectively to communicate, interpret, and construct meaning across contexts, while appreciating linguistic diversity and cultural expression.
- iii) Apply literacy skills to access, analyse, and create information across disciplines, supporting learning, inquiry and knowledge construction.

Cognitive Domain

- i) Demonstrate conceptual understanding across disciplines, building clarity of key ideas, and the ability to make connections across areas of learning.
- ii) Apply higher-order thinking skills and 21st century skills including critical and creative thinking, problem-solving, collaboration, and perseverance.
- iii) Use scientific and mathematical reasoning, including inquiry, evidence-based thinking, analysis of data and logical reasoning, including through interdisciplinary approaches such as STEAM, to understand and solve problems.
- iv) Demonstrate learning-to-learn skills, including goal setting, reflection, monitoring progress, and adapting strategies to become independent and lifelong learners.
- v) Apply financial, economic and entrepreneurial understanding, including responsible resource management, informed decision-making, and initiative in real-world contexts.

Physical and Psychomotor Domain

- i) Develop motor skills, including fine and gross motor coordination, balance and control to support movement and participation.
- ii) Maintain physical health and wellbeing through healthy habits, including hygiene, nutrition, and physical activity.

Socio-Emotional Domain

- i) Develop self-awareness and emotional regulation to support wellbeing and responsible behaviour.
- ii) Build positive relationships through empathy, cooperation, and effective interpersonal skills.
- iii) Make responsible decisions and respond constructively to challenges in everyday situations.

Moral and Spiritual Domain

- i) Demonstrate patriotism by valuing Pakistan's constitutional principles, history and cultural heritage, and contributing positively to social harmony and national development.

- ii) Demonstrate ethical behaviour and a sense of moral and spiritual responsibility in personal and social contexts guided by the values enshrined in the Constitution of Islamic Republic of Pakistan.
- iii) Respect and value social and cultural contexts and demonstrate responsible citizenship by contributing positively at local, national and global levels.

Cross-Cutting Themes and Competencies

- i) Demonstrate responsible digital citizenship, including safe and ethical use of technology, critical evaluation of information, media literacy, and cyber safety.
- ii) Develop emerging AI literacy while recognising the primacy of human agency and ensuring responsible, human-centred use of artificial intelligence.
- iii) Show environmental awareness and understand the impacts of climate change. Respond with responsible action, such as conservation, while building resilience and preparedness for environmental challenges.
- iv) Express ideas, identity and creativity through aesthetic and cultural forms, including arts, heritage, and creative practices.
- v) These learner standards are not confined to a single stage but are progressively developed across the continuum of schooling. Each stage contributes in a distinct and developmentally appropriate manner to the realization of these outcomes.
- vi) Thus, the design of school stages is not merely structural, but purpose-driven, ensuring that curriculum, learning experiences, and expectations at each level are aligned with the gradual development of these competencies.

5.3 Developmental Stages

The stages of learning within the NCF are based on developmental theories of learning, in particular the work of Jean Piaget. His theory highlights that learners gradually progress from concrete experiences toward abstract reasoning as they grow. Each stage reflects how learners understand and process knowledge within that age bracket. These stages provide a foundation for designing curriculum in a developmentally appropriate manner, as well as for shaping pedagogical and assessment practices. Although the stages defined in the NCF are developmentally linked to Piaget's work, the terminology is contextually aligned with the ground realities of Pakistan.

A child's development is usually described in periods corresponding to approximate age ranges:

5.3.1 Sensorimotor Stage (birth to 2 years):

A stage of high dependence and sensory motor discovery, where attachment, touch, sound, and visual exploration form the foundation of learning. Infants progress from reflexes to developing gross and fine motor skills, and early cognitive and language abilities. Emotional bonds with caregivers are critical, and early socio-emotional responses are primarily centred to immediate needs and feelings. Infants begin to develop awareness of their immediate environment and familiarity with people and objects.

5.3.2 Early Childhood Stage (3 to 7 years):

A stage of exploration and play, where curiosity flourishes and language and social skills expand rapidly. Children develop mental representations, vocabulary, conversational abilities, emotional regulation, and begin understanding rules and fairness in a basic way. They begin to become more self-sufficient and spend more time with peers. This is also a period of intense exploration through play during which fine motor skills are refined, social awareness is enhanced, and emotional bonds are strengthened.

5.3.3 Middle to Late Childhood (7 to 11 years):

A stage of competence and structured learning based on previous stage, where logical thinking, foundational academic skills, and peer relationships strengthen. Children show improvements in memory, problem-solving, motor skills, language use, self-regulation, and fairness. They are expected to achieve foundational literacy and numeracy and begin forming a broader understanding of social and moral rules due to exposure to the wider world around them and their culture. They start enjoying their competence through exploration with confidence, moving towards higher-order learning.

5.3.4 Adolescence (11 years onwards):

This is a stage of development that is characterized by identity formation and the quest for independence. Adolescents develop critical thinking, moral reflection, advanced language and writing skills, self-awareness, and stronger peer influences. Education at this stage must support reasoning, dialogue, responsible decision-making, and preparation for adult roles.

5.4 Linking Learner Development with Stage Design

Stage design is where vision meets implementation. If child development explains how children grow, concept development explains how knowledge deepens, and modes of inquiry explain how learners engage with and construct understanding. Stage design brings these dimensions together into a coherent structure for schooling.

In the NCF 2026, learning progression is not viewed as the accumulation of isolated skills or content, but as the integrated development of understanding, competencies, and ways of thinking. Stage design is therefore informed by the interaction of three interrelated dimensions:

- i) the progression of concepts from concrete to abstract,
- ii) the development of foundational domains such as literacy and numeracy, and
- iii) the evolution of inquiry from exploration to structured and independent investigation.

These dimensions do not operate in isolation; rather, they evolve together across stages, ensuring that learning progresses from experience to understanding, from skill acquisition to meaningful application, and from guided participation to independent and critical inquiry. Accordingly, the organization of school stages reflects systematic shifts in:

- i) the nature of knowledge (from experiential to conceptual and theoretical),
- ii) the mode of learning (from play-based exploration to disciplined inquiry), and
- iii) the level of learner agency (from supported engagement to self-directed learning).

Our stages of schooling are not rigid structural divisions, but developmentally grounded learning continuum that integrate child growth, knowledge construction, and modes of inquiry. This integrated approach ensures coherence across curriculum, pedagogy, and assessment, while maintaining alignment with learners' developmental readiness.

Building on these developmental stages, the NCF 2026 proposes a 3+3+3+4 (with a break up of lower primary, upper primary, middle and secondary/higher secondary) design for school education, with four corresponding stages:

5.4.1 Lower Primary Stage

Lower primary stage covers Early Childhood Care and Education (ECCE) to Grade-2. This stage is divided into two parts: 1 year of mandatory pre-school (institutions that can manage the programme effectively will have the option of expanding ECCE to two years), followed by

2 years in primary school (Grades 1-2). The overall objective of ECCE is to attain optimal outcomes in the domains of holistic development encompassing linguistic, cognitive, physical, socio-emotional, moral and spiritual domains. The curricular structure is organized around these developmentally aligned domains. It emphasizes early exploration, play-based learning, and the development of foundational literacy and numeracy within a nurturing and stimulating environment. This reflects the national priority for foundational learning as articulated in the NEPDF 2024.

At this stage, learning is rooted in children's immediate experiences and interactions with their surroundings. Concept development is primarily perceptual and experiential, with children forming early understandings through sensory engagement, play, language, and social interaction. Learning moves from concrete experiences toward emerging symbolic representation, supported by rich and meaningful contexts.

Literacy and numeracy emerge as integrated capabilities rather than isolated subjects. Oral language forms the foundation of literacy, with listening and speaking supported through storytelling, conversation, and play. Early reading and writing develop gradually through exposure to print, phonological awareness, and guided interaction. Numeracy develops through everyday experiences such as counting, sorting, comparing, recognizing patterns, and exploring shapes and spatial relationships, primarily through play and hands-on activities.

Modes of inquiry at this stage are driven by curiosity, exploration, and imitation. Children learn by observing, questioning, experimenting, and interacting with people and materials around them. Inquiry is informal and intuitive, supported by opportunities for open-ended exploration and guided discovery.

Pedagogy is therefore predominantly play-based, activity-oriented, and inquiry-driven, supported by strong teacher-child relationships. Learning experiences include storytelling, role play, creative expression, movement, and hands-on exploration. A balance is maintained between individual and group activities, allowing children to learn at their own pace while also developing social and collaborative skills.

Assessment practices rely primarily on continuous observation and documentation of learning, rather than formal testing, enabling teachers to understand each child's developmental progress and provide appropriate support. Classroom environments are designed to promote movement, interaction, and exploration, reflecting the developmental needs of young learners. Overall, this

stage lays the foundation for lifelong learning by integrating early concept formation, emerging literacy and numeracy, and curiosity-driven inquiry within a coherent and developmentally appropriate learning experience.

In alignment with international commitments, including SDG 4.2, and recognizing the critical importance of early years, the Framework acknowledges the need for a comprehensive continuum of care and education from birth onwards. However, in view of existing system capacity, institutional readiness, and resource considerations, the current Framework proposes provision of one year of ECCE as an immediate and implementable priority. A phased expansion towards a birth-to-ECCE continuum is envisaged as system capacity strengthens over time.

5.4.2 Upper Primary Stage (Grades 3-5)

This stage spans three years of education and builds on the Lower Primary Stage by gradually transitioning from play, discovery, and activity-based learning toward more structured classroom practices. Although learning continues to be rooted in activity and experience, increasing emphasis is placed on organization, clarity, and sustained academic engagement. The objective of this stage is to consolidate foundational capacities and dispositions developed earlier, enabling students to achieve fluency in literacy and numeracy and to develop the skills necessary for systematic exploration of the natural and social worlds.

At this stage, concept development progresses from perceptual understanding to more organized and functional forms of knowledge. Learners begin to classify, relate, and apply concepts within familiar contexts, gradually moving toward more structured representations. Understanding becomes less dependent on immediate experience and more guided by emerging logical relationships and patterns.

Literacy and numeracy are consolidated as foundational tools for learning. Learners develop fluency in reading and writing, enabling them to engage with texts with increasing independence and comprehension. Numeracy evolves from intuitive understanding to structured competence, including place value, operations, and problem-solving within familiar contexts. These domains begin to support learning across subjects, allowing learners to interpret information, express ideas, and solve problems more systematically.

Modes of inquiry at this stage become more guided and intentional. Learners are encouraged to observe, compare, ask questions, and engage in simple investigations. Inquiry is supported through structured activities that develop attention, reasoning, and problem-solving abilities, while still maintaining opportunities for exploration and collaborative learning.

Pedagogy continues to be activity- and discovery-based, complemented by increasing use of textbooks and guided instruction. A balance is maintained between teacher-led learning, individual work, and group activities. Assessment practices combine continuous observation with structured tasks and periodic evaluations, supporting both learning progression and feedback.

Overall, this stage consolidates foundational capacities and prepares learners for more abstract, subject-based learning by integrating structured concept development, strengthened literacy and numeracy, and guided inquiry within a coherent learning framework.

5.4.3 Middle Stage (Grades 6-8)

This stage marks a significant shift in the nature of learning, as learners transition from primarily experience-based understanding to more abstract and disciplinary forms of knowledge. This stage introduces subject-specific learning while building on the conceptual and foundational capacities developed in earlier stages. The objective of this stage is to develop systematic disciplinary knowledge, critical thinking, problem-solving abilities, and values necessary for democratic, economic, cultural participation and preparation for secondary stage. Content increasingly focuses on theoretical concepts, abstract ideas, and unfamiliar contexts.

At this stage, concept development moves toward theoretical and abstract understanding. Learners engage with concepts that require reasoning beyond immediate experience, including relationships, systems, and underlying principles within different disciplines. Knowledge becomes more structured, interconnected, and reflective of disciplinary frameworks.

Literacy and numeracy are applied across subject areas as essential tools for learning. Literacy supports comprehension of increasingly complex texts, interpretation of subject-specific language, and expression of ideas through structured writing and discussion. Numeracy enables learners to engage with abstract representations, patterns, data, and problem-solving in both mathematical and real-world contexts.

Modes of inquiry become more systematic and evidence-based. Learners engage in structured investigations, develop hypotheses, analyse information, and justify conclusions. Inquiry at this stage emphasizes reasoning, use of evidence, and understanding of basic disciplinary methods, enabling learners to think more critically and independently.

Pedagogy reflects a balanced approach between direct instruction and opportunities for inquiry, discussion, and exploration. Subject specialization allows for deeper engagement with content, while connections across disciplines are encouraged to promote coherence. Assessment practices become more formal, focusing on reasoning, analysis, and application rather than recall.

Overall, this stage strengthens learners' ability to think abstractly, engage with disciplinary knowledge, and apply literacy, numeracy, and inquiry skills in structured and meaningful ways, preparing them for advanced learning in the secondary stage.

5.4.4 Secondary/Higher Secondary Stages (Grades 9-12)

The Secondary and Higher Secondary Stages (Grades 9-12) represent the culmination of school education, characterized by depth of understanding, intellectual maturity, and increasing learner autonomy. At this stage, learners engage with knowledge in more specialized, flexible, and future-oriented ways, aligning their learning pathways with their interests and aspirations. Students may choose to exit after Grade 10 and re-enter later to pursue vocational or other specialized courses at the Higher Secondary level, including in alternative or specialized institutions. The overarching objectives are the learner's holistic development, intellectual maturity, autonomy, and readiness for higher education or the world of work.

Concept development at this stage is deeply embedded within disciplinary frameworks and extends toward advanced abstraction, analysis, and synthesis. Learners engage with complex ideas, theoretical constructs, and interdisciplinary connections, enabling them to apply knowledge across contexts and address real-world challenges.

Literacy and numeracy evolve into advanced competencies that support critical thinking, analysis, and problem-solving. Literacy enables learners to interpret complex texts, construct arguments, evaluate multiple perspectives, and communicate effectively across contexts. Numeracy supports quantitative reasoning, modelling, and application in academic, professional, and everyday contexts, including interdisciplinary problem-solving.

Modes of inquiry become analytical, critical, and generative. Learners frame complex questions, evaluate evidence from multiple sources, synthesize information across disciplines, and generate original insights or solutions. Inquiry at this stage reflects disciplinary rigor while also enabling interdisciplinary exploration and innovation.

Pedagogy integrates direct instruction with inquiry-based, project-based, and experiential learning approaches, supporting both depth and flexibility in learning. Learners are encouraged to take increasing responsibility for their learning, with teachers acting as facilitators and mentors. Assessment practices are competency-based, emphasizing higher-order skills such as analysis, synthesis, application, and evaluation.

Overall, this stage prepares learners for higher education, the world of work, and active citizenship by integrating advanced conceptual understanding, sophisticated literacy and numeracy, and independent, critical inquiry within a coherent and flexible learning framework.

6 The Curriculum Design

The NCF recommends a curriculum development process that is systematic, evidence-based, and consultative, aligning with national priorities, global trends, and classroom needs. It starts by defining national education goals and standards, which are then broken down into benchmarks and Student Learning Outcomes (SLOs) for each grade to ensure coherence. The process is informed by research, international practices, and societal needs, while respecting Pakistan's cultural and Islamic values. Stakeholder engagement (teachers, experts, provincial bodies) is key, with iterative reviews and feedback to refine content and assessment. The goal is to align curriculum with textbooks, teacher training, and assessments, treating curriculum development as a dynamic, ongoing process that adapts to change and promotes an inclusive, competency-based education for lifelong learning.

The NCF recommends organizing learning around three interrelated pillars: learning stages, major learning areas, and a subject-based competency framework with clearly defined learning outcomes. Together, these pillars will ensure coherence, continuity and progression across grades, supporting learners' preparation for further education, the world of work and responsible citizenship.

6.1 Key Terminologies and Structure

This section provides key definitions of the curriculum structure, including competencies, strands, standards, benchmarks, and student learning outcomes. Together, these elements help organise learning expectations within a subject and support clarity, progression, and coherence across stages of schooling.

6.1.1 Competencies

There is a clear global shift towards competency-based curricula that articulate not only what learners should know but what they should be able to do with that knowledge. Competencies are integrated capabilities that enable learners to effectively apply knowledge, skills, attitudes, and values to solve problems, perform tasks, and respond to real-life situations in academic, social, and professional contexts. They are developed progressively across stages of schooling and reflect application of learning in academic, social and practical settings.

In addition to subject-specific competencies the curriculum committees will also identify relevant overarching competencies in line with the developmental needs of the learners and relevance to the subject. Details of overarching competencies are at **Annex-III**.

6.1.2 Strand

Strands refer to broad areas of learning within a subject that help organize knowledge, skills and their progression. It structures the curriculum into key themes around which it is developed. They represent major components of the subject and are not measurable on their own. They however provide a framework for grouping related knowledge and skills and establishing the base for building the curriculum on. Strands can be built around content areas or competencies depending on how the subject is structured and helps in organising the curriculum expectations in a manner that suitably helps achieving the purpose.

6.1.3 Standards

In curriculum design, standards are clear, broad statements designed around content and skills and competencies strands that describe what learners are expected to know and be able to do at an across a span of grades. They define the level of quality or proficiency students should achieve in a subject. Standards translate competencies (what learners can do broadly) into measurable expectations of learning within a subject, providing structure to key areas of learning and their progression across stages. In simple terms competencies describe abilities; standards define the expected level of achievement of those abilities.

6.1.4 Benchmarks

Benchmarks are grade-band or stage-wise descriptions of progress toward a standard. They clarify how learning develops over time, indicating what level of knowledge, skill or understanding students are expected to demonstrate at different stages / points in their schooling. Benchmarks provide a structured pathway for progression, ensuring continuity in learning while guiding curriculum design, teaching and assessment.

6.1.5 Student Learning Outcomes (SLOs)

Student Learning Outcomes are specific, measurable statements describing what learners should know and be able to do at the end of a lesson, unit, or grade. They guide classroom instruction and assessment and are written using observable action verbs. SLOs are derived from benchmarks and standards, translating broader expectations into clear and assessable

learning targets. They support teachers in planning instruction, monitoring progress and providing feedback, while ensuring alignment between curriculum, pedagogy, and assessment. In summary, standards, benchmarks, and student learning outcomes are interconnected components of the curriculum that together ensure coherence and progression in learning. Standards define the broad expectations of what learners should know and be able to do in a subject across schooling, benchmarks break these expectations into stage-wise progressions showing how learning develops over time and student learning outcomes translate these benchmarks into specific, measurable outcomes at the grade level. Together, they provide a clear learning trajectory from overarching expectations to classroom level requirements. Some examples of curriculum structure are at **Annex-IV**. Bloom's Taxonomy is at **Annex-V**.

6.1.6 Summary and Connectivity

The chart in Figure 1 below summarises the above terminologies and also depicts the connectivity and flow. The standards layout the broader expectations and benchmarks break these into grade-wise expectations. Student learning outcomes (SLOs) translate these into measurable outcomes. These describe what the learner should know and be able to do at each stage of learning. All of these guide classroom teaching to produce coherence, progression, and accountability of learning transitioning from broader to classroom level expectations.

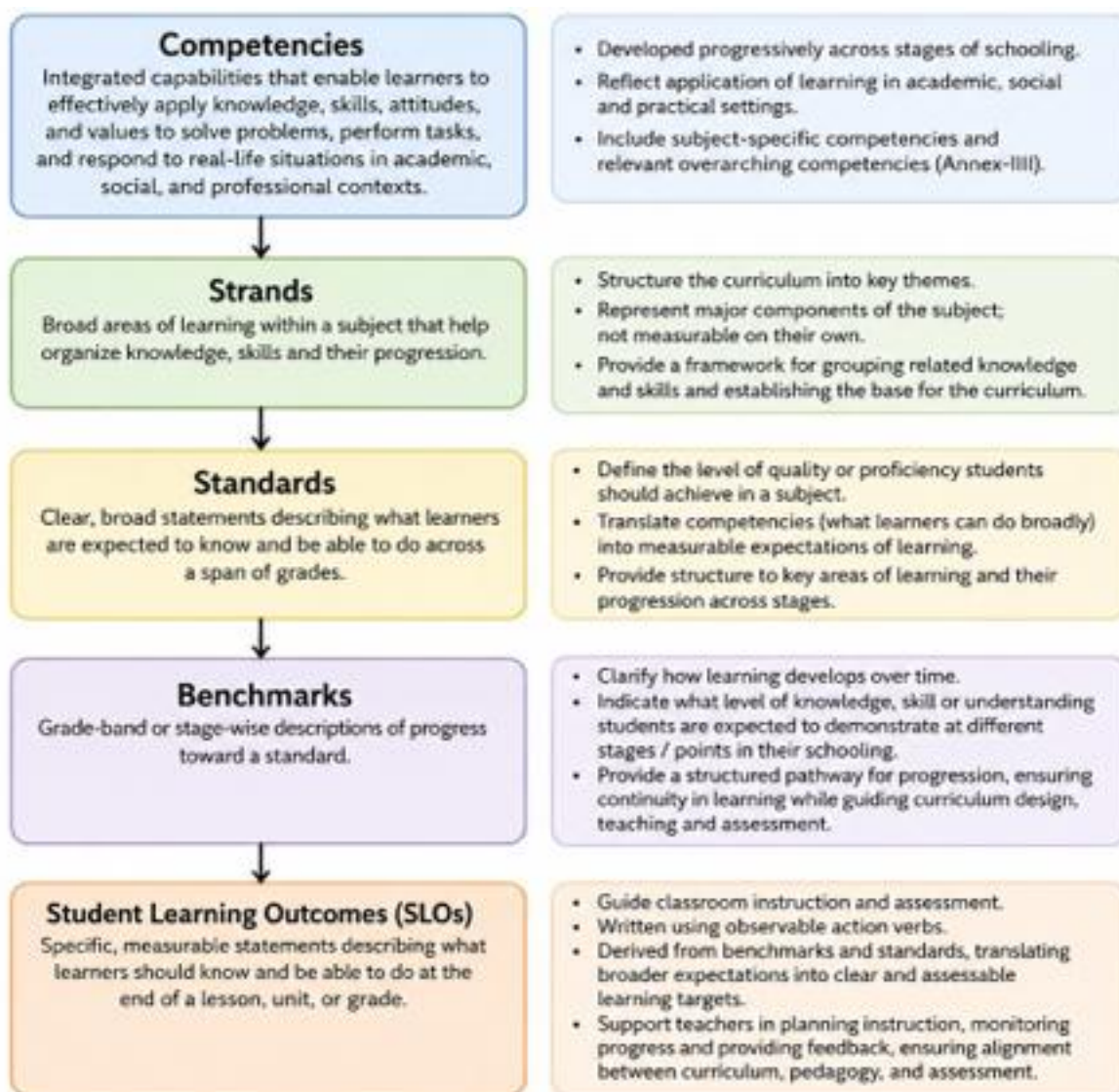


Figure 1: Chart of Learning Outcomes:Key Terminologies and Structure of a Curriculum

6.2 Curriculum Standards

Curriculum standards define the expectations that guide the design, organisation and implementation of curriculum across stages and subjects. They provide a common framework to ensure quality, coherence and consistency in curriculum development across diverse contexts and education systems in the country.

Within the NCF, these standards inform how learning is structured, sequenced and delivered. They support vertical alignment by ensuring coherent progression across stages and horizontal alignment by promoting connections across subjects and learning areas. In doing so they help balance knowledge, skills, values, and competencies within the curriculum.

The standards also support a shift towards competency-based and learner-centred education by emphasising conceptual understanding, application of knowledge, critical thinking and real-life relevance. At the same time, they allow for contextual flexibility, enabling adaptation to local needs while maintaining national coherence.

These standards reflect the five key domains of learner development (linguistic, cognitive, physical and motor, socio-emotional, and moral and spiritual), ensuring a holistic approach to education that supports the overall development of learners. The NCF sets out the following curriculum standards:

6.2.1 Linguistic Development

- i) Ensure systematic development of language and literacy across stages, beginning in familiar language and progressively introducing additional languages to support comprehension and expression.
- ii) Provide structured opportunities for listening, speaking, reading and writing across subjects to support communication and meaning-making.
- iii) Enable the use of language as a tool for learning across disciplines, supporting comprehension, interpretation and expression in diverse contexts.

6.2.2 Cognitive Development

- i) Align curriculum design with learners' developmental stages, ensuring age-appropriateness, contextual relevance to local environments, cultures and lived realities, and coherent progression across levels.
- ii) Ensure the development of conceptual understanding, problem-solving, financial and economic literacy and the application of knowledge in real-life contexts to support deeper and transferable learning.
- iii) Ensure strong foundational learning in early stages, particularly in language and numeracy, through developmentally appropriate pacing, structured progression and sufficient time for concept mastery, enabling learners to build secure foundations before moving to more complex learning.
- iv) Promote higher-order thinking including critical thinking, creativity, reasoning and problem-solving through interdisciplinary and integrated learning approaches, including STEAM, to support analytical and innovative thinking.

- v) Embed 21st century competencies including communication, collaboration, adaptability, initiative and teamwork across learning.
- vi) Enable reflection and independent learning to support lifelong learning and adaptability.

6.2.3 Physical and Motor Development

Enhance physical development, motor skills, health, nutrition and well-being to support active participation, coordination and readiness for learning.

6.2.4 Socio-Emotional Development

Develop social and emotional learning, self-awareness, resilience, empathy and positive relationships to support well-being and responsible behaviour.

Cultivate personal development, including character building, adaptability, career awareness, life skills and lifelong learning, to enable informed choices and responsible participation in society.

6.2.5 Moral and Spiritual Development

Embed constitutional values, Islamic principles, national identity, and respect for diversity, promoting ethical conduct, social responsibility, and peaceful coexistence.

Integrate national shared values grounded in constitutional principles and policy frameworks, promoting integrity, justice, respect, tolerance, patriotism, national cohesion and peaceful coexistence.

Promote inclusive and equitable education by ensuring access, participation and meaningful learning for all learners, including those with diverse abilities, language backgrounds and socio-economic contexts, through respect for diversity, gender equity and differentiated support.

Enable responsible citizenship at local, national and global levels by promoting a sense of responsibility towards community, national resources and public and private assets, and encouraging active civic engagement.

6.2.6 Cross-Domain (Integrative)

Integrate environmental awareness, climate change, water conservation, sustainability and cross-cutting priorities across learning to promote responsible action and stewardship.

Advance digital and data literacy, enabling learners to critically evaluate information, use digital tools effectively, and make informed decisions in diverse contexts.

Promote responsible and ethical use of technology, including human-centred artificial intelligence, ensuring learners exercise informed human agency and maintain human oversight in digital environments.

Align learning outcomes, pedagogy and assessment through competency-based approaches that assess knowledge, skills and attitudes, while supporting teacher agency, professional flexibility, and continuous improvement through evidence, feedback and implementation-based learning.

6.3 Curriculum Coherence and Alignment

A well-designed curriculum ensures coherence across grades and subjects. Core concepts are developed progressively across stages and grades with increasing depth and cognitive demand. This allows age appropriate learning expectations and realistic progression of learning and avoids redundancy across grades and subjects. The NCF therefore emphasizes vertical alignment, horizontal alignment, and a balanced, learner-centred, approach to breadth and depth of learning.

6.3.1 Vertical Alignment

Vertical alignment in curriculum refers to the systematic progression of learning across grades or learning stages. It requires that knowledge, skills and attitudes build logically from one level to the next. In a vertically aligned curriculum concepts are introduced, reinforced, and deepened over time and there are no gaps, unnecessary repetition, or steep jumps in difficulty for which previous work has not prepared the learner.

NCF suggests the following actions to ensure vertical alignment of curricula across subjects:

- i) Subject curriculum frameworks define learning progressions that describe how knowledge, skills and attitudes are developed from pre-primary to secondary stage clarify increasing depth, complexity, and cognitive demand over time. The frameworks

will be developed on the principle that the learning graph is non-linear over the school years. Development of foundational skills in early years calls for learning along a gentle slope that gives time for learning through repetition and at a slow, age-appropriate, pace. Once this stage is crossed the graph can become steep and the difficulty level can continue to rise in post-primary stages.

- ii) Broad standards are organized into grade-banded benchmarks in line with the learning stages suggested in the NCF (e.g., ECCE-Grade 2, Grade 3-5, Grade 6–8, Grade 9–10 and Grade 11–12), with progressive increase in expectations as a continuum across stages. This means that each benchmark builds on the previous one and avoids overlap and repetition.
- iii) Key concepts and skills are revisited across grades through a spiral approach which enables reinforcement of concepts and a deeper conceptual understanding over time.
- iv) Curriculum expectations move from recall and understanding to application, analysis, evaluation and creation. This progression will be aligned with developmental stages and guided by relevant learning theories.
- v) Subject curricula will include mapping grids that track where concepts and skills are introduced, reinforced, and mastered across grades to identify gaps or duplication.
- vi) Subject frameworks will be developed as per weightage given to each in the scheme of studies and the consequent time available. The content within each subject will be given weightage accordingly. This will include time allocated for assessments.

6.3.2 Horizontal Alignment: Coherence across a Grade or Learning Stages

Horizontal alignment requires coherence across subjects within the same grade or learning stage. Curriculum expectations, pedagogical approaches, and assessment practices are coordinated to prevent fragmentation or excessive workload.

Interdisciplinary connections and shared competencies will be embedded across subjects to support integrated learning experiences and eliminate redundancies. The NCF suggests the following aspects for horizontal alignment:

- i) Cognitive demand is age-appropriate and comparable across subjects.
- ii) Curriculum expectations are balanced across subjects to ensure a manageable learning load.

- iii) Overarching competencies (e.g., critical thinking, communication, digital literacy) and cross-cutting priorities (e.g., sustainability, citizenship) are embedded across subjects at the same grade level, supporting coherence in skills and values development.
- iv) Topics, skills, and assessments are aligned across subjects with assessment tasks focussed on curriculum expectations rather than only content coverage.
- v) Learning experiences are sequenced coherently within a grade to support continuity and reinforcement across subjects.
- vi) Common pedagogical approaches (e.g., inquiry-based learning) and shared assessment principles (e.g., performance tasks) are promoted across subjects to ensure consistency in learning experiences.

Curriculum processes will mandate coordination among subject committees. Structured opportunities to collaborate and jointly review horizontal and vertical balance will be built into the formal curriculum review process.

6.3.3 Breadth and Depth: A Balanced Coverage

Curriculum design will have a deliberate balance between the range of content covered (breadth) and the level of understanding developed (depth). This will enable learners to engage meaningfully with core concepts, key ideas, and essential skills and keep learning focused, manageable, and relevant. This balance will be achieved through careful selection and organisation of content around core competencies, reducing redundancy, and avoiding fragmentation. In early grades the focus will remain on strengthening foundational learning skills with a gradual expansion to more breadth and depth in later stages.

Learning expectations will be sequenced to allow sufficient time for conceptual understanding, practice, application, and reflection, rather than superficial exposure to multiple topics. Depth will be strengthened through approaches such as inquiry-based learning, problem-solving, and real-world application, enabling learners to transfer knowledge across contexts.

Progression within the curriculum will move from foundational knowledge and comprehension to higher-order thinking that includes application, analysis, evaluation, and creation, in alignment with learners' developmental readiness. This structured progression will facilitate learners to not only acquire knowledge but also develop the capacity to analyse it critically, creatively, and responsibly.

6.4 Curriculum Development Process

Curriculum development and review under the NCF will be a structured, cyclical and evidence-driven process designed to ensure coherence, relevance, and quality across all stages of education. It will integrate curriculum design, implementation, monitoring, and evaluation into a continuous improvement cycle to allow the curriculum to respond to evolving learner needs, societal priorities, and national goals.

The process will follow the stages outlined below:

6.4.1 Diagnostics and Situational Analysis

Curriculum development will begin with a systematic review of existing curricula, learner performance data, classroom practices and stakeholder feedback. This stage will identify gaps related to content overload, sequencing, progression, and alignment as well as emerging societal needs and future skill requirements. The analysis will ensure that curriculum design is grounded in evidence and responsive to learner contexts, developmental stages, and national priorities.

The diagnostic will be strengthened by a review of comparable regional and international curricula, standards, and curriculum frameworks. This review will examine subject scope, organisation of learning areas, progression across stages, treatment of competencies, content load, pedagogical orientation, and assessment approaches. The purpose is not to replicate external models but to identify relevant good practices, compare expectations with appropriate international benchmarks and inform curriculum decisions in ways that remain aligned with national priorities, learner contexts and the SoS.

6.4.2 Development of Scheme of Studies

The SoS, informed by the diagnosis, will be reviewed and refined as the next step in the curriculum development process. The SoS defines the overall structure of schooling, and includes subject allocation, instructional time, distribution of learning areas, and weightage of assessment across stages and grades. It establishes the scope within which curriculum development takes place and ensures balance, feasibility and coherence across subjects. All subsequent stages of curriculum development are guided by, and remain aligned with, the approved SoS.

6.4.3 Conceptualization and Scoping

At the conceptualization stage, subject curriculum development or review will articulate clear subject-specific goals and rationale that:

- i) Align with national education goals and learner needs.
- ii) Justify the scope, depth and importance of the subject.
- iii) Consider learners' workload, time allocation, and coherence within the SoS

NCCW will provide professional guidance and coordination support to ensure consistency across subjects and grade levels. The same processes will be followed in the federating units to maintain coherence within the national framework.

6.4.4 Development of Subject Curricula

Subject curriculum development focuses on translating subject goals and objectives into clearly defined learning expectations, content organisation and aligned pedagogical and assessment guidance. It ensures coherence, progression, and alignment across the subject while remaining within the scope of the SoS. The curriculum establishes what learners are expected to know and be able to do, how learning is structured across stages and grades and how it supports meaningful engagement with the subject. It also provides direction for teaching, assessment and development of learning materials while allowing contextual flexibility across diverse education settings.

Articulation of Subject Purpose

The framework clearly articulates the educational purpose and value of the subject including its contribution to learners' intellectual, personal, social, and civic development and preparation for the world of work. It explains why the subject is taught and how it supports broader educational aims, national priorities, and the development of future-ready competencies.

Scope and Objectives of the Subject

The subject curriculum defines the scope of the subject by identifying its key areas of knowledge and learning and clearly articulates the objectives that guide teaching and learning within the subject. It clarifies the breadth and depth of content to be addressed across stages ensuring that the subject remains focused, coherent and manageable within the overall SoS.

Instructional time, learner workload and the relationship of the subject with other learning areas are factored into the content load.

The objectives of the subject also refer to the learner and curriculum standards defined in the NCF and reflect how the subject curriculum will contribute to the development of learners across linguistic, cognitive, physical, socio-emotional, and moral domains.

Key Principles for Curriculum Design

The Framework also establishes key principles that guide curriculum development within the subject. These principles are derived from the broader direction of the NCF as well as the specific nature and demands of each individual subject. These principles may include an emphasis on conceptual progression, application of knowledge in real-life contexts, development of subject-specific skills, considerations such as depth over breadth, as well as cognitive processes and modes of inquiry that are central to the subject. Aligned with learner standards, these principles ensure that the subject supports holistic learner development.

Identification of Learning Areas or Strands

The subject curriculum framework is organised into clearly defined learning areas or strands that represent the major components of the discipline. This organisation provides the structural basis for curriculum development and ensures that different aspects of the subject are addressed in a balanced and systematic manner. For content-based subjects these are content strands like ‘numbers and operations’ in Mathematics, and for skills-based subjects like languages these are skills strands like ‘oral communication’.

Rationale for Learning Areas

The framework also includes a brief rationale for each strand that explains its importance and contribution to the overall subject. The rationale clarifies how the learning area supports the development of knowledge skills and understanding within the subject and how it connects to real-life contexts and future learning.

Development of Standards for Learning Areas

Standards are developed for each learning area or strand identified in the subject curriculum framework. These standards express the overarching learning expectations for each strand and define what learners are expected to know and be able to do. Standards for overarching

competencies are also developed to reflect broader capabilities that cut across learning areas. Together these standards establish the foundation for progression and inclusion of both subject-specific and cross-cutting learning.

Formulation of Stage-wise Benchmarks

Stage-wise benchmarks are developed for each standard to describe the progression of learning. These benchmarks indicate what learners will know and be able to do at each learning stage. They outline how learning develops, deepens and becomes more complex over time. The stage-wise structuring ensures continuity across stages and provides a smooth, and age- appropriate, pathway for progression from foundational to advanced levels of learning.

Organisation and Grade-wise Sequencing of Content

Grade-wise content is sequenced and organized for each learning area to reflect developmental progression from simple to complex and alignment with the instructional time and structure defined in the SoS and in congruence with the SLOs for each grade. At this stage introduction of concepts, their reinforcement and systematic extension across grades is designed. Vertical and horizontal alignment are ascertained during this process. Content selection focuses on the principle of depth over breadth so that unnecessary overlap and excessive content load is reduced to ensure sufficient time for understanding and application.

Development of Grade-wise Student Learning Outcomes

Benchmarks are translated into specific measurable grade-wise SLOs using clear and observable action verbs. These outcomes define what learners will know and be able to do at the end of each grade and reflect progression across stages. SLOs are aligned with the benchmarks and are developed around the selected and sequenced content areas. This ensures that learning outcomes are both developmentally appropriate and linked to the identified content areas.

SLOs reflect knowledge, skills, and attitudes and progress from lower to higher-order thinking including application, analysis, creation as well as competencies such as reasoning, problem-solving, and inquiry to support meaningful learning. They serve as guidance for teachers, assessment experts, and textbook authors for planning and pacing lessons, designing assessments and developing learning materials.

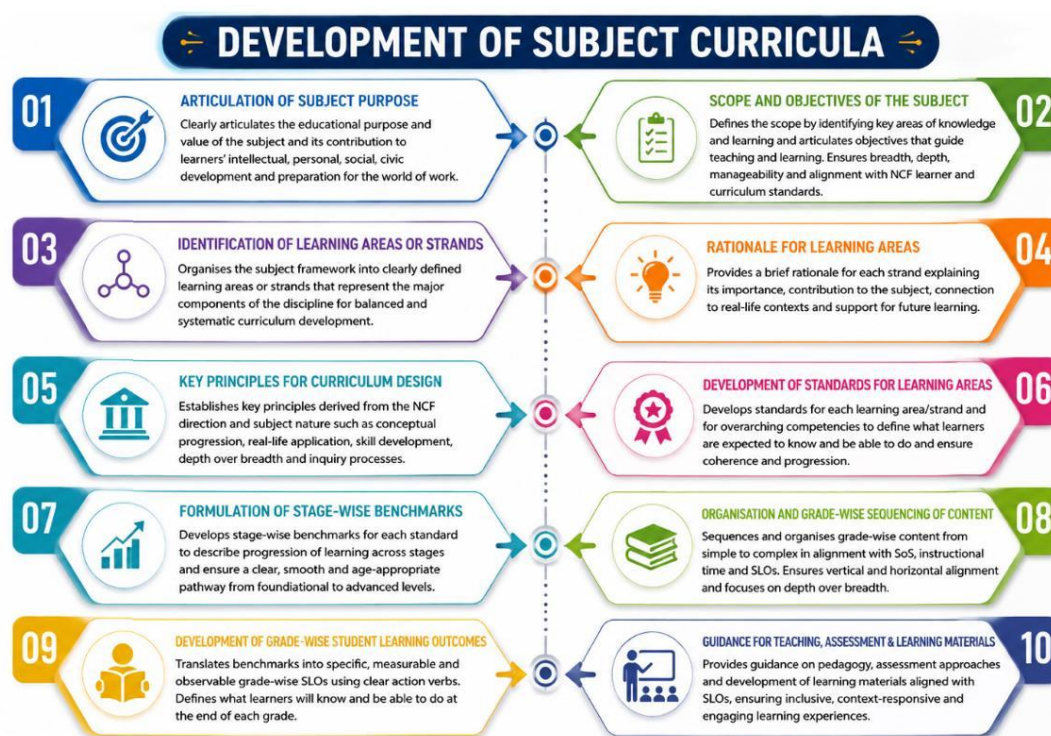


Figure 2: Development of Subject Curricula

6.4.5 Embedding Overarching Competencies

Competencies like critical thinking, communication, collaboration and problem-solving are integrated within learning areas and connected to real-life situations and contexts so that learning remains relevant and purposeful for learners.

Competencies are embedded within content, tasks and learning experiences to enable learners to apply knowledge in a variety of ways. This ensures that learning does not remain limited to knowledge acquisition but also supports the development of skills needed to use and apply that knowledge in real-life situations.

Ensuring Inclusion and Accessibility

Inclusion in the curriculum means that the content and SLOs reflect the diversity of learners including those with different abilities, linguistic backgrounds, gender, minorities and other marginalised groups. It also means that the curriculum is mindful of biases that may be present in content, language or representation, and seeks to avoid them.

The curriculum design process ensures that these considerations are built into the draft so that all learners can relate to and engage with what they learn. Once the draft curriculum is

developed, it is reviewed through an equity and inclusion lens to identify any gaps or biases and to strengthen inclusion where needed.

Integration of Cross-Cutting Themes

The subject curriculum identifies relevant cross-cutting themes to be integrated within the subject and provides a brief rationale for their inclusion. These themes are aligned with the nature of the subject and meaningfully embedded rather than treated as separate content areas.

Cross-cutting themes include key values, competencies, and contemporary priorities. Inclusion of these themes across subjects, to the extent possible and relevant, strengthens the ability of the curriculum to achieve important learning goals. Embedding these themes across the curriculum makes learning more relevant, connected, and future-oriented and prepares learners to respond to emerging challenges and contribute positively at personal, community, national and global levels. Examples of cross-cutting themes are:

- i) Values and Ethics
- ii) National and Global Citizenship
- iii) Environmental Sustainability and Climate Change
- iv) Health, Wellbeing, and Safety
- v) Peace and Social Harmony
- vi) Digital Literacy
- vii) Financial and Economic Literacy
- viii) 21st Century Skills (Core Competencies)
- ix) Life Skills
- x) Inclusion, Equity, and Gender Sensitivity
- xi) Cultural Heritage and Identity

Detailed description and sub-themes of cross-cutting themes is at **Annex-II**.

Guidance on Pedagogical Approaches

The curriculum includes guidance on pedagogical approaches and practices that are aligned with the nature of the subject and learners' developmental stages. Pedagogical guidance provides a variety of methodologies aligned with the subject that teachers can employ to make the subject learning meaningful for the learners and promote active engagement, inquiry, problem-solving, and experiential learning.

Guidance on Assessment

The curriculum also provides guidance on assessment aligned with the subject requirements and the defined SLOs. A balanced approach that incorporates diagnostic, formative, and summative methods to support learning and provide meaningful feedback is recommended. Assessment guidelines are aligned with the relative weightage of each topic in the content area. These include lower to higher order thinking areas and ensure that the whole range is covered as required in the design of the subject curriculum.

Guidance on Textbooks and Learning Materials

The curriculum provides guidance for development of textbooks and other learning materials aligned with the defined standards, benchmarks and SLOs. This guidance focuses on the organisation and sequencing of content, the level of conceptual depth expected and the types of examples, language considerations, activities and tasks that support application of learning. The guidelines also include integrating inquiry, problem-solving, and skill development within textbooks and learning materials. Lessons learnt from the diagnosis discussed in Chapter 1, point to the need of more detailed guidelines for textbook authors, illustrators and reviewers. The details will ensure alignment between the intent and weightage of the curriculum and the content of the textbooks.

In addition to textbooks, the guidance extends to supplementary learning materials, teacher guides and other supporting resources, ensuring that all materials are coherent with the curriculum and responsive to classroom needs.

6.5 Applying the STEAM Approach

The NCF affirms the concept of STEAM as an approach to curriculum design and implementation that strengthens connections across subjects while maintaining the integrity of each discipline.

Learning is defined as a visible and permanent change in behaviour and is achieved by exposing the learner to various tasks, including activities and projects, in line with the spirit of a subject. STEAM helps build simple and meaningful connections across subject areas to achieve this objective. When using STEAM in a subject curriculum design, it is integrated into standards, benchmarks, and learning outcomes. This helps learners use knowledge from different subjects in totality and independently design tasks, conduct investigations, and solve real-life problems.

Textbooks and teacher guides for such a curriculum include examples and tasks that show these connections. Assessment looks at how learners apply their understanding, work with others, think through problems critically, and create solutions, in addition to understanding concepts.

STEAM is reflected through simple and meaningful connections across subject areas such as science, technology, engineering, arts, and mathematics. These connections are built into standards, benchmarks, and learning outcomes. Learning includes activities and projects that help learners use knowledge from different subjects together, such as design tasks, investigations, and real-life problem-solving. The arts support creativity, expression, and design thinking alongside scientific and mathematical understanding. Learning is guided through questions and exploration rather than a focus on content alone. Textbooks and teacher guides include examples and tasks that show these connections. Assessment looks at how learners apply their understanding, work with others, think through problems, think critically, and create solutions, in addition to understanding concepts.

6.6 Co-Curricular and Extracurricular

Time for co-curricular and extracurricular activities is provided in the scheme of studies. Schools can utilise this time for both types of activities. Co-curricular activities are directly linked to the courses in the curriculum and augment the learning of specific subjects. Examples include spelling contests, mathematics competitions, and science clubs. Extracurricular activities are not directly linked to the curriculum but are used by schools to shape a more well-rounded personality in the learner. Examples include debating and sports competitions.

7 Language in Curriculum

Pakistan's language complex is rooted in its linguistic richness, with multiple languages (and dialects) spoken in every province. The colonial legacy of English as the language of elitism (now also seen as a global connector) and the mandatory learning of Urdu as the national language mean that multilingual education in Pakistan is not a choice. Learning English and Urdu will always be mandatory in Pakistani schools. The challenge lies in teaching them in the right sequence and with a child-centred approach, according to the context of the learner, including different socio-economic and linguistic backgrounds. In the case of English, the socio-economic situation of a household and use of English as a language are mostly correlated. Educationists (linguists and learning scientists) have solutions that will allow all children to learn the two main languages (Urdu and English) at the required proficiency level, using accepted methods of language learning. These solutions are available and applied in many countries.

In Pakistan, however, these solutions have been supplanted by approaches suited to children from certain, mostly well-resourced, households. This excludes the majority. The problem primarily lies in the perceptions of language learning approaches that fuel debate in society and at the political level. These perceptions, voiced powerfully, have pushed the language structuring in the curriculum away from a child-centred approach and toward one that is detrimental to learning. The dominance of perception over scientifically established truths on language learning cuts across Pakistan's issues in education, including the inability to attain universal literacy and poor learning outcomes.

7.1 The Situation

Urdu and English have been the two constants in Pakistan's schools since independence. Each was added to the language mix and formal education through different roots. Urdu is the national language, and it is intrinsic to Pakistani identity. While it was not the language spoken by the majority at the time of independence, its usage in communities was much wider than that of English, especially in urban areas. Its use has expanded since independence with the help of mass media and schooling. Urdu is now, in addition to being the national language, practically the lingua franca across speakers of different linguistic groups. Teaching and learning Urdu in schools is universally accepted, even though the design of its learning path

needs to be reviewed. Also, despite its expanded footprint, Urdu does not constitute the first language of children in many communities.

The debate of even greater significance is between the use of the language spoken in the community (which can be Urdu) and English in the early years of learning. The status of English has skewed the language debate and curriculum design away from empirically proven language sequencing and learning approaches recommended by learning scientists and linguists. Therefore, like in most post-colonial states, the language of the former colonists-used by a limited elite - functions as the principal obstacle to a learner-centred approach.

English arrived in the subcontinent with the British, and as their power expanded, its status as a language also began to rise. By the middle of the 19th century, it had supplanted all previous official languages in government. It also became the language of social mobility. Yet, the requisite proficiency was not mastered by more than a small minority. This was the result of the British colonists' philosophy of education, which never embraced equity as an objective. Policies deliberately created schools with limited objectives for poor communities (often known as vernacular schools), some government schools that offered higher quality with English as the medium of instruction, and a smattering of institutions for the local elite and European children. These, combined with missionary schools, created a small class with high proficiency in English - the language of the rulers, government, and corporate commerce.

The creation of this exclusive elite, with English as the language that marked the divide, was the outcome of a policy aimed at perpetuating colonial rule through the development of a limited number of local human resources to support the colonial masters in administration and other high-priority areas. Education as a right was never even a remote consideration.

An independent Pakistan, in its very first National Education Conference in 1947, made two commitments to the people: the right to quality education for all children and the inclusion of Islamic ethos in the school curriculum. As education in the country began to scale up to meet these objectives, the realities of a governance structure unsuited for the scale of the task, along with the socio-cultural and linguistic diversities of the country, began to manifest as challenges to meeting educational aspirations.

The vertical fractures created by the de facto and de jure status of the English language proved to be one of the key obstacles, as its pre-independence status not only continued but was further strengthened. Successful completion of higher education and access to the most prestigious

jobs and social spaces were not possible without requisite proficiency in English. Unlike the colonial masters, who needed a narrow co-opted elite, the governments of Pakistan responded to society's aspiration to learn English at a higher level and across the board. Multiple policies and curricula failed to make an effective dent in the linguistic and education gap between more resourced households and the disadvantaged. Social mobility through education was witnessed, but not at the scale targeted in official policies.

The divide in education delivery, initially created before independence, has become starker as an education market has emerged in the form of “elite private schools.” These range from standalone pre-partition elite schools or those modelled on them, to chains with branches in multiple cities that cater to local high-income households. The latter began to develop in the 1970s and have continued to expand. These schools are separate from government schools due to their differentiated linguistic and curricular paths, where high expectations of proficiency are built into learning from the pre-school years. The high-stakes examination systems that students at these schools take are conducted by international syndicates and bodies that require a very high proficiency in the English language.

These institutions are seen as conduits of educational success. While they may be best suited to the endowments of richer households with strong home support for acquiring the English language, their learning path does not suit the context of the rest. Despite this incompatibility, parental demand for curricular paths that mimic those of these “elite private schools” distorts the policy space and has, in the past, resulted in curricula for government schools that are completely misaligned with learners' needs, especially in the early years. Reconciliation between legitimate parental demands, based on the visible success of elite private school graduates, and policies and curricula more suited to children from low-income households has not been possible. The tension between the two positions has transformed into an attritional political and social debate.

A default outcome of elevating English learning by mimicking elite school systems has been the relegation of community languages or mother tongues (other than Urdu) to the status of “lesser languages.” Their value in formal learning in schools as essential to a child-centred approach has been crowded out by the demand for learning English from the start of schooling. The NCS 2026, with participation from the country's top linguists and education specialists, debated the issue and clearly considered this approach detrimental to learning of an overwhelming majority of children. The recommendations called for Mother Tongue-Based

Multilingual Education (MTB-MLE), which will enable all children to reach a competitive level of proficiency in the English language by the end of grade 12. This will give them an equal opportunity to compete for places in quality higher education institutions and the more elusive jobs in the world of work. The MTB-MLE approach is also endorsed by the NEPDF 2024, which underlines the importance of using the mother tongue or the familiar language of the child in early learning and transitioning appropriately to other languages.

7.2 Language Learning Process

Language is a skill divided into four parts: listening, speaking, reading, and writing. The first two skills together form oracy, while the latter two are the components of literacy. The acquisition process for every language must follow the sequence of moving from oracy to literacy. This is absolutely imperative when literacy is introduced into a young child's life. Proficiency in oracy supports the acquisition of literacy skills. This means that literacy expectations in the foundational years should build on a language already spoken by the child at home. This can be the mother tongue or another familiar language spoken either at home or in the community. The NCF uses the term "familiar language" for both categories. As long as the child has adequate oral proficiency, the language can be used for foundational literacy and numeracy, in fact, for all foundational learning. If literacy is introduced in a language not used in the child's social environment, it will not be possible for them to develop any proficiency, whether oral or reading. The pressure of learning an unfamiliar language will also suppress cognitive development, as cognition and language learning are interdependent (Cummins J 1979), (Karunanithi and Sivanatham 2025).

Foundational literacy acquisition, like all skills learned for the first time, is slow (even in the familiar language), requiring repetition and reinforcement along a gentle learning slope. Once literacy skills in one language are acquired to a particular benchmark, the next language can be introduced. However, here too, oracy must remain the primary process. Once the child has learned the fundamentals of literacy in the familiar language, these skills can be expedited early in the learning path for the new language. This will shorten the period of literacy acquisition in the latter.

The learning slope and time required for acquiring a new language depend on the status of that language in the child's environment. The language can be categorized as a second language (L2) or as a third language (L3). The familiar language is L1. Definitions for each are as follows:

- i) **L1: (First Language/Mother Tongue):** L1 is acquired through natural exposure at home and immediate environment. It is a subconscious and natural process termed more as acquisition than learning. It is a language a speaker is most fluent in, such as their mother tongue, any other languages spoken at home or a language spoken in the community. In L1 there is no prior language knowledge that may hinder the acquisition process and therefore results in native-like proficiency. The NCF categorizes these as a “familiar language”.
- ii) **L2 (Second Language):** L2 is a non-home language learned often in school or for communication in the community. It can involve both natural acquisition and conscious learning processes depending on when the learner is exposed to L2. The success of L2 acquisition or learning depends on the age of acquisition, quality of input, and learning environment. L1 facilitates the process of L2 development.
- iii) **L3 (Third Language):** L3 is any subsequent language acquired after L1 and L2. It is often termed as a foreign language because of its non-availability in the immediate environment. It involves multilingual acquisition undertones as there can be cross-linguistic influence from both L1 and L2. Sufficient knowledge of L1 and L2 are therefore key determinants in learning L3.

These categorisations are defined by an assessment of ground realities and are essential to the development of a realistic language path, scope, sequencing, and pacing in the curriculum design. The category in which a language is placed also determines the stage at which it is introduced into the Scheme of Studies and, consequently, the curriculum.

There are, however, more than one approaches to MTB-MLE. These depend on a number of factors, including proficiency of teachers in a given language or set of languages. One example is of introduction of L2 or even L3 in early grades for oracy development over a prolonged period before transitioning to literacy in the language. The medium for literacy acquisition and instruction will continue to be the familiar language during this period. The sequential process, where L2 and L3 are introduced later in the education journey, is simpler in low capacity environments as teacher competency cannot support early introduction of other languages even for oracy development. Each provincial and area government can decide on adopting the language approach based on their respective contexts using the options and conceptual guidelines discussed in this Chapter.

7.3 Learning in a Language: The Medium of Instruction

The use of language as a medium of instruction becomes a difficult decision in curricula that include multiple languages. It becomes especially complicated when the language aspired to as the Medium of Instruction (MoI) is not the first language. In the case of Pakistan, English as the medium of instruction is a core demand. This demand is justified, given that most higher education courses are available only in English. Areas with high market demand, such as medicine, engineering, sciences, and business administration, are exclusively taught in English. The school curriculum must, therefore, be designed to help students achieve proficiency levels that will provide them with the opportunity to pursue higher education. This may require a shift to English as the medium of instruction at some stage of schooling. The decision to make this transition cannot be arbitrary.

MoI is the language in which classroom content is available, the instruction is undertaken, and assessment is conducted.

Transition to a medium of instruction (MoI) in L2 or L3 is not possible unless the student has acquired a basic level of proficiency in oracy and literacy in the language to be used as MoI. This required proficiency level for the transition is defined by standardized benchmarks used in curriculum development. In the case of English for children for whom it is categorized as a foreign language, this level of proficiency is not achievable before the learner enters secondary education.

7.4 Developing the Language Schema

The NCF recommends context-based language learning paths, as per the flexibility provided by the “Core-Plus” principle. The overarching framework is the Mother Tongue-Based Multilingual Education (MTB-MLE) approach. The term “mother tongue” can be used interchangeably with “familiar language” (as explained above in the definition of L1). The language schema in an MTB-MLE-based curriculum has three design elements: firstly, the languages to be taught in school; secondly, the languages to be used as the medium of instruction at various stages; and finally, the language learning path for each language taught in the curriculum.

Another element is the choice of languages that can be learned as elective subjects. These elective subjects can be higher-proficiency literature courses in one of the mandatory

languages, or an additional language. There are five steps required for the development of a language schema:

- i) Defining Objectives of Inclusion of a Language in a Schema
- ii) Mapping the Language Landscape
- iii) Selection of the Number of Languages as Mandatory
- iv) Benchmarking and Laddering of Languages
- v) Identifying and Developing Curricula for Elective Language Courses

7.4.1 Defining Objectives

The decision to include a given set of languages in the curriculum schema is a composite of child centred learning and politically determined need. The motivation for inclusion of the latter can be based on economic realities, social demand, national identity, religious reasons and others. In Pakistan two languages have the status of mandatory inclusion: Urdu and English. Arabic as the language that provides access to better understanding of Quran and Sunnah is encouraged as an elective language option.

The use of familiar language (or the mother tongue) as the language of learning in schools is primarily dictated by a child centred approach to literacy acquisition in early years. Any continuation beyond that requirement (where the skills become strong enough to be transferable to another language) depends on the political decision for needs of preservation or growth of the language for cultural reasons. This can be mandatory continuity or through an elective subject path.

Only one province, Sindh, uses mother tongue as a subject, as well as, medium of instruction in schools. The province has two paths: one for children with Sindhi as the mother tongue and the other for children with Urdu as their mother tongue.

7.4.2 Language Mapping

The language mix in Pakistan is known, but its spread is not clear. There have been geographic shifts in language patterns. Migration into urban areas or other provinces has increased the repertoire of languages among children in these families. The use of Urdu in official mass media over the years, its continuity into private media, and its expanded presence on the internet have led to the spread of its usage. The exact footprint is not known, nor is it clear whether its

use in a particular place is at the level of L1 or L2. In some communities, it might still be completely foreign, but the number of such areas has definitely reduced over the years.

English language proficiency remains limited in terms of numbers. This is a consensus among practicing teachers and researchers. This means that the vast majority of children have no meaningful lived experience of the language. This is primarily true for those attending average government and low-cost private schools.

Knowing the exact ground situation regarding the use of different languages and their proficiency levels is essential for designing a child-centred language learning path. This means that, ideally, a language mapping should precede decisions on language inclusion processes in the curriculum. None has been conducted in Pakistan since independence. The language column in the Population Census does not provide a picture of individual multilingualism or proficiency levels in languages. Nevertheless, curriculum developers will require some information prior to designing the language learning path. In the absence of a mapping, indirect methods will help guide the decision. These methods can include feedback from teachers, researchers, and educators in different parts of the country.

7.4.3 Selection of Languages

Once the mapping, or an estimate of language use, is completed, the next step is the selection of languages for in-school education. This will depend on the language situation in a community, district, or province. Arguably, depending on location, Pakistan will have two types of models:

- i) The two-step model
- ii) The three-step model

The two-step model can be employed where Urdu is the familiar language and can be used for early literacy. Here, English is used as the other language in the schema. In a majority of cases, it will be treated as a foreign language, irrespective, of the choice of L1 being Urdu or another language. The only exception is children from households where a high proficiency in English prevails. These children can be taught both Urdu and English as L1 or L2.

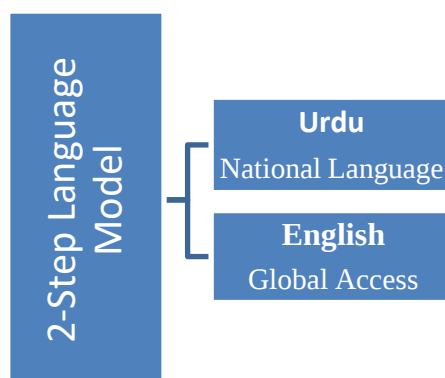


Figure 3: Two-Step Language Model

The second possibility is the three-step model, where the community or familiar language is used for literacy acquisition, with Urdu introduced as L2 and English (later) as L3 or the foreign language.

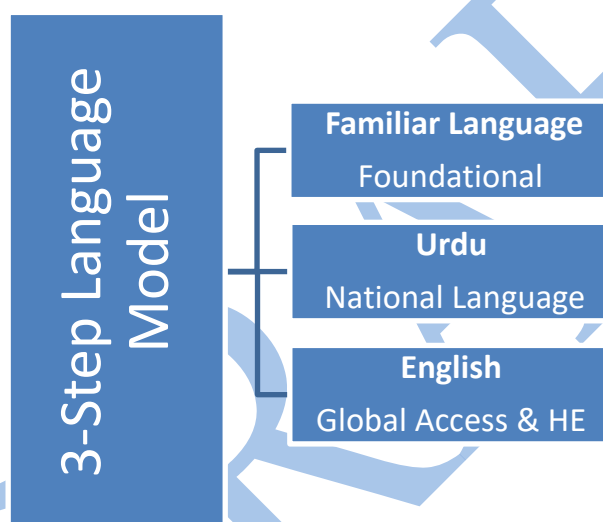


Figure 4: Three-Step Language Model

This will be more complex than the two-language model (Sindh is already using a three-step model). The decision to use a two-step or three-step model, however, should not be determined by the difficulty of implementation. The best model suited to the language endowment of the child should be selected.

7.4.4 Benchmarking and Laddering

Languages need to be benchmarked realistically, based on mapping, categorisation, and the purpose of their inclusion. Learning expectations must be aligned with the purpose for which a language is included. Urdu and English are the two languages that will continue until Grade 12. For these languages, the benchmarking process should first determine the endpoint for schooling. This will be the level of proficiency a child is expected to reach in any language by

the end of higher secondary school. This depends on both the requirements beyond school and the point at which the language is introduced into the curriculum (based on the child's language experience prior to school) and its initial categorisation (L1, L2, L3). Children may not reach the highest level of proficiency in a given benchmarking model, but as long as it prepares them for the purpose of inclusion, it should provide a foundation for the next level. This means English should be learnt to the point where the child can cope with higher education, with the understanding that language learning continues into tertiary levels. Urdu needs to be benchmarked as a national language, and by the end of higher secondary, it should be at a level where the child can continue into Urdu-based higher education, where such opportunities exist.

Upper benchmarking for L1 (in the three-step model) is also necessary. L1 is the language that provides the scaffolding through which skill sets are transferred to the next language. It must be learnt to a specific benchmark level before its skills can be effectively transferred to the learning of a newly introduced language. L1 should not be discontinued at the point when L2 is introduced. The two should continue together, as L1 will continue to scaffold proficiency in L2.

Once the endpoint benchmarks are established, a language ladder should be built by reducing benchmark levels in a backward-working manner. These benchmarks should cover all four skills: listening, speaking, reading, and writing. Laddering for languages will also determine the point at which the medium of instruction should transfer from one language to another.

Table 1 below shows an example of laddering for Urdu, where the language is included in the curriculum as L1. As can be seen it begins with assumptions on oral language proficiency of the child prior to admission in school. While it builds towards literacy, there is continued development of oracy. While initial acquisition of literacy builds on oracy the two skills reinforce each other as learning progresses.

Table 1: Example of Language Laddering: Urdu as L1

Stage	Grade	Indicative CEFR-referenced profile	Main language-development purpose
School-entry baseline	Before ECCE	Oral language below or around A1–A2, depending on exposure	Establish functional oral Urdu and readiness for formal literacy
ECCE	ECCE	Oral: A1+/A2; Reading and writing: Pre-A1	Oral enrichment, phonological awareness, print awareness and emergent writing
Lower primary	Grade 1	Oral: A2; Reading: A1; Writing: A1	Establish decoding, basic comprehension and sentence-level writing

Lower primary	Grade 2	Oral: A2+/B1; Reading: A2; Writing: A2	Achieve foundational literacy and produce short connected texts
Lower Primary	Grade 3	Oral: B1; Reading: A2+; Writing: A2+	Move from learning to read towards reading and writing for learning
Upper primary	Grades 4–5	Oral: B1+/B2; Reading: B1; Writing: B1	Develop independent reading and organised multi-paragraph writing
Elementary	Grades 6–8	Oral: B2; Reading: B2; Writing: B2	Develop academic language, analysis, argument and subject-based literacy
Secondary	Grades 9–10	Oral: B2+/C1; Reading: C1; Writing: B2+/C1	Develop critical, literary, academic and formal language
Higher secondary	Grades 11–12	Oral: C1; Reading: C1; Writing: C1, with C2 extension	Develop advanced academic, professional, literary and research communication

Table 2 demonstrates laddering of English if it is introduced as L3 in grade 3. By end of grade 12 students can attain a level of B2. The level represents an independent-user level. It includes understanding the main ideas of complex texts, communicating with sufficient fluency and spontaneity, and producing clear, detailed language on a reasonably wide range of subjects. In summary these children will be ready for learning in English in higher education after completion of grade 12.

Table 2: Example of English Laddering: English as L3 or Foreign Language

Grade	Oral proficiency	Reading proficiency	Writing proficiency	Overall emphasis
Beginning of Grade 3	Pre-A1 or no assumed proficiency	Pre-A1	Pre-A1	Entry diagnostic and oral familiarisation
End of Grade 3	Pre-A1+	Pre-A1	Pre-A1	Initial oral language, alphabet knowledge and emergent literacy
End of Grade 4	A1	A1	Pre-A1+/A1	Simple everyday communication and sentence-level literacy
End of Grade 5	A1+	A1+	A1	Consolidated basic-user proficiency
End of Grade 6	A2.1*	A1+/A2.1	A1+	Expansion beyond memorised language
End of Grade 7	A2	A2	A2	Functional communication on familiar matters
End of Grade 8	A2+	A2+	A2/A2+	Transition towards independent language use

End of Grade 9	B1.1	B1.1	A2+/B1.1	Connected communication and subject-related language
End of Grade 10	B1+	B1+	B1	Independent use for familiar academic and social purposes
End of Grade 11	B2.1	B2.1	B1+	Increasingly complex academic and public communication
End of Grade 12	B2	B2	B2	Independent academic, social and professional communication

**The subdivisions A2.1, B1.1 and B2.1 are curriculum-planning markers rather than additional official CEFR bands. CEFR levels may be subdivided locally where this supports coherent curriculum and assessment.*

7.4.5 Translanguaging

Translanguaging is the purposeful use of a learner's full linguistic repertoire to understand, communicate and learn. It should be encouraged in multilingual classrooms. In practice, a student may listen in one language, discuss an idea in another, read a text in English, and explain or write the concept in Urdu or Sindhi. The languages are used together as learning resources rather than kept completely separate. For example, in an English-medium science class, a teacher may introduce a concept in English, allow students to discuss it in Urdu or Sindhi, and then ask them to present the answer in English.

Translanguaging is broader than simple code-switching. Code-switching usually refers to moving between distinct languages in conversation. Translanguaging focuses on how multilingual learners draw flexibly on all their language resources to make meaning.

It can help learners:

- i. Understand difficult concepts;
- ii. Connect new knowledge with prior learning;
- iii. Participate more confidently;
- iv. Develop academic vocabulary;
- v. Support transition to a new language of instruction;
- vi. Strengthen both subject learning and language learning.

However, it should be planned carefully. It should support, not replace, sustained opportunities to learn and use the target language. In a Pakistani classroom, for instance, Urdu, Sindhi or another home language may be used to clarify concepts, while English remains the target language for progressively more complex reading, speaking and writing.

7.4.6 Elective Languages

Elective languages will be selected based on their utility to society. Arabic is the first choice for elective languages. Other options may include Chinese, given Pakistan's growing trade relations with China and the latter's expansion as the world's largest economy. As a neighbouring country, Pakistan can benefit more from the economic opportunities provided through commercial relations with China. Additional languages may be included in the list of electives, based on need and system capacity.

7.5 Other Considerations

Language in the curriculum is used across all subjects. The use of language in other subjects should be aligned with the principles (and schema) established for language learning. Congruence in vocabulary, syntax, and grammar is necessary.

Graded vocabulary prepared for language laddering should be used in the development of textbooks for other subjects. All subject curricula and textbooks should be reviewed by language experts (responsible for the curriculum of the relevant language) to ensure consistency and congruence.

In the NCS 2026, it was agreed that the use of scientific, mathematical, and other technical terms will be standardized, regardless of the language in which these subjects are taught. The standard terms in English will be used.

The benchmarking of language, once completed, will guide the difficulty level of literature used in language courses. The literature selected to support language learning should also be congruent with the expectations of the language ladder at each stage. Literature courses will be developed separately and offered as electives for children who aspire to advance in that direction.

A national framework for benchmarking languages should be developed. A reference framework for languages will support areas beyond school education, including higher education and employment requirements in the market. An example is the Common European Framework of Reference (CEFR) for Languages. This framework is used in multiple countries, including many outside Europe. It can be applied to any language. The CEFR provides benchmarks for all four language skills at each level: listening, speaking, reading, and writing. The CEFR or similar frameworks should be reviewed to develop the national framework.

7.6 Limitations and Challenges

An MTB-MLE approach, with an overall shift in language laddering, benchmarking, and learning processes, will require significant changes in curriculum implementation processes. These would include textbook development, pedagogical approaches, and assessments. The language used in high-stakes examinations, especially, will have to be aligned with the benchmarks along the language ladder.

The transition to the three-step model in places where it is not currently employed will require the development of resources in the familiar language. These again include content (curriculum and textbooks), teacher training, and assessment items. There will be a cost to the transition.

The transition may not be able to accommodate all languages in a province. There might still be some groups that will be left out. For equity reasons, it is important to include all language groups (that need to shift to the three-step model) over time. Without such a transition, some groups will continue to be left behind in education.

8 Inclusion and Equity in the Curriculum

Inclusion and equity must permeate the entire curriculum, regardless of subject specialization. Curriculum developers are responsible for embedding inclusive principles across all disciplines, ensuring that no learner is marginalized. Exclusion originates in individual mind sets and is reflected in discriminatory social attitudes, unequal economic opportunities, and the denial of human dignity and rights. Despite the existence of state policies, constitutional guarantees of Fundamental Rights in the Islamic Republic of Pakistan, and Pakistan's commitments to international conventions and agendas, inequities and exclusions continue to persist. The curriculum therefore serves as a critical instrument of state policy, enabling the practical realization of its agenda for inclusion and equity.

NCF is predicated on the unequivocal principle that every child, irrespective of gender, ability, socioeconomic background, religion, ethnicity, language, or geographic location, possesses an inherent right to a quality education that respects their dignity, cultivates their potential, and prepares them for meaningful participation in society. This vision is not aspirational but obligatory, a fundamental right rooted firmly in the foundational compact of the state. The Constitution of the Islamic Republic of Pakistan (1973) provides the bedrock. Article 25 guarantees equality before the law and prohibits discrimination. Article 22(1) safeguards the rights of religious minorities to freely profess and practice their religion (See Box).

Article 22(1) — Safeguards as to educational institutions in respect of religion, etc.

“No person attending any educational institution shall be required to receive religious instruction, or take part in any religious ceremony, or attend religious worship, if such instruction, ceremony or worship relates to a religion other than his own.”

Article 25 — Equality of citizens

“(1) All citizens are equal before law and are entitled to equal protection of law.

(2) There shall be no discrimination on the basis of sex.

(3) Nothing in this Article shall prevent the State from making any special provision for the protection of women and children.”

Article 34 — Full participation of women in national life

“Steps shall be taken to ensure full participation of women in all spheres of national life.”

Article 34 commits the state to ensure the full participation of women in all spheres of national life. Article 37 mandates the promotion of social justice and the eradication of social evils. The

NCF operationalizes these constitutional guarantees, translating legal imperatives into pedagogical reality. It aligns with Pakistan's international commitments, including the UN-SDGs, specifically SDG-4 on inclusive and equitable quality education and SDG-10 on reduced inequalities, the UN Convention on the Rights of the Child (CRC), and the UN Convention on the Rights of Persons with Disabilities (UNCRPD).

The Framework situates inclusion within broad, interconnected dimensions that encompass social and economic inclusion, inclusion of minorities and promotion of inter-faith and intra-faith harmony, gender inclusion, cultural inclusion and disability inclusive curriculum. It emphasizes that equity must be embedded across all aspects of curriculum design and delivery, ensuring that no learner is marginalized. Rather than treating inclusion as a set of isolated categories, the Framework underscores its holistic nature addressing barriers, promoting participation, and safeguarding dignity. In doing so, it positions the curriculum as a transformative instrument for advancing fairness, representation, and accessibility across the education system.

The Framework recognizes that a child's identity is multifaceted. A girl from a religious or minority community from a poor household with a disability faces intersecting and compounding barriers. Therefore, the curriculum must adopt an intersectional lens, understanding how various dimensions of exclusion overlap and designing interventions that are holistic and synergistic. This approach ensures that the curriculum becomes a tool for dismantling structural inequities rather than merely managing symptoms.

These principles are closely aligned with the learner standards of the NCF, particularly those related to equity, social responsibility, and inclusive participation, ensuring that inclusion is not only a policy commitment but an expected outcome of learning. Furthermore, inclusion and equity are to be realized across all stages of schooling, with early years focusing on access, participation, and safe learning environments, and later stages emphasizing representation, critical awareness, and equitable outcomes.

8.1 Socially and Economically Inclusive Curriculum

The curriculum serves as a central policy instrument for advancing inclusion in education and beyond. Within this framework, the guidelines, particularly those addressing the language domain, tackle the exclusion of linguistic groups by ensuring equitable inclusion rooted in the child's context. This approach inevitably brings children from disadvantaged households into

an educational process that offers robust opportunities for upward social mobility. Equally importantly, the curriculum seeks to dismantle hierarchies of human dignity linked to socio-economic status. It calls for depictions, themes, and concepts that affirm the equality of all human beings and the inherent right to dignity, irrespective of poverty, power, or other markers of social standing. Such attitudinal transformation is not confined to religious education, where it has traditionally been emphasized, but extends across all relevant subjects and thematic areas to embed inclusion system-wide.

8.2 Inter-Faith Inclusive Curriculum

Pakistan's identity as an Islamic Republic, with over 96 percent of its population being Muslim, provides a unique and powerful foundation for promoting religious inclusion that is both theologically sound and constitutionally mandated. The right of religious minorities to freely pursue education in their respective faiths is safeguarded under Article 22(1) of the Constitution and reinforced across the broader framework of Fundamental Rights. Curriculum-guided themes and content are designed not only to prevent negative portrayals of religious minorities but to actively celebrate their role as Pakistanis and acknowledge their proud record of service to the nation and their contributions to its diversity and richness. For inter-faith harmony, content across subjects, especially Social Studies, Pakistan Studies, Islamic Studies or Religious Education for non-Muslims, will positively portray religious minorities as equal citizens and integral contributors to Pakistan's cultural, social, and economic fabric. It shall include narratives of their historical and contemporary contributions, moving beyond mere tolerance to active celebration of national diversity. The curriculum rigorously eliminates all material that directly or indirectly stereotypes, vilifies, or marginalizes any religious community. Textbook review mechanisms must be strengthened with representation from minority communities.

Additionally, children belonging to ethnic minorities suffer abuse, neglect, exploitation and discrimination in and outside the schools. The curriculum will refer to imparting skills to identify potential threats to children belonging to such population groups and create conditions that ensure their rights and provision of education in a friendly and interactive manner without any occurrence of abuse, neglect, exploitation and discrimination. At the same time, it will create address attitudes that give birth such discrimination.

8.3 Intra-Faith Inclusion

The curriculum must actively cultivate respect for all schools of thought, as enshrined in Islamic teachings and Article 20 (b) of the Constitution. This involves a two-pronged strategy. First is the inter-faith inclusion, discussed above, and the second, equally important component, is intra-faith harmony. For intra faith sensitivity, the curriculum will respectfully represent the diversity of Islamic thought and practice within Pakistan, such as various schools of jurisprudence and spiritual traditions, fostering a culture of mutual respect and countering sectarian prejudice. It will facilitate factual, respectful learning, thereby, promoting a culture of dialogue and coexistence as a core civic value.

8.4 Gender Inclusive Curriculum

Pakistan's chronic underperformance on global gender indices, such as World Economic Forum's Global Gender Gap Report 2025, and UNDP Gender Inequality Index (GII)¹, underscore a national crisis. A transformative approach is required, moving beyond access for girls to fundamentally reshaping gender norms and power relations for all learners. The curriculum must be gender transformative, and rights based, acknowledging the full spectrum of gender identity.

Article 34 of the Constitution of the Islamic Republic of Pakistan affirms that “steps shall be taken to ensure full participation of women in all spheres of national life.” Yet Pakistan continues to rank low across global gender indices. The National Gender Policy Framework (NGPF) 2022 highlights these deficiencies and sets out multiple policy interventions, including 22 specifically directed at inclusion in education and the teaching-learning process. A key sub-objective is to “institutionalize gender-transformative education,” with a strategic priority directly relevant to curriculum: “Introduce course content or modules to promote gender-equitable attitudes and behaviours in schools, with focus on both girls and boys.”

Gender inclusion in curricula is central to Pakistan's social, economic, and political progress. As with other areas of inclusion, the curriculum must operate along two complementary paths: the removal of stereotypical depictions of gender, and the proactive integration of themes that recognize the value of gender emancipation across all spheres of life. The NGPF 2022 should serve as a guiding reference for embedding relevant themes and subjects into curriculum design and implementation.

¹ UNDP's gender index is reported in the Human Development Report 2025.

Using the NGPF as the guiding document, the curriculum will deconstruct the gender binary in stereo-typical roles and recognition of the most marginalised group of trans genders. Content will move beyond traditional gender binary categorisation. This involves using inclusive language, depicting diverse family structures and roles, and integrating themes that allow all children to see themselves reflected positively. For proactive integration of gendered analysis, subjects like Science and history will highlight contributions of women. Literature shall include works by and about them. History will also analyse the impact of patriarchal structures and celebrate agents of change. Civics will explicitly teach about laws protecting against gender-based discrimination and violence.

8.5 Culturally Inclusive Curriculum

Pakistani culture is a vibrant tapestry of provincial, ethnic, linguistic, and regional traditions. A national curriculum that ignores this diversity, risks nurturing alienation and undermining national unity. True cohesion is built on mutual respect, not assimilation. For systematic cultural mapping and integration, the curriculum development process must involve mapping of Pakistan's major and minor cultural traditions, folk histories, literatures, arts, music, and ethical systems. This knowledge shall be woven into relevant subjects. Regional languages and literatures will be offered and valued. Social Studies will teach the history and contributions of all regions. Arts curricula will include diverse traditions and skills. To foster a composite national identity, the curriculum will narrate Pakistan's history and present as a shared project of all its peoples. The purpose is to cultivate an identity where provincial and regional identity is perfectly congruent with being a patriotic Pakistani.

8.6 Disability Inclusive Curriculum

Inclusion for children with disabilities is a non-negotiable right, not an act of charity. The curriculum must drive a paradigm shift from viewing disability as a deficit to understanding it as an aspect of human diversity that interacts with environmental barriers. Universal Design for Learning (UDL) principles will guide all curriculum materials and pedagogical approaches. These will be designed from the outset to provide multiple means of engagement, representation, action and expression. A transformation in beliefs and practices is essential to ensure the inclusion of children and adults with disabilities as fellow citizens with full rights, including the right to dignity guaranteed by the Constitution of the Islamic Republic of Pakistan and international conventions on inclusion.

Disability-inclusive education recognizes the right of all children both, with and without disabilities, to learn together in an equitable and supportive environment. Persons with disabilities frequently encounter discrimination and exclusion in societies that fail to acknowledge them as equal individuals with diverse abilities. Such marginalization often begins at birth and persists throughout life, manifesting in attitudes that range from patronizing sympathy to overt psychological and physical harm. Between these extremes lie subtle yet pervasive forms of discrimination that undermine self-esteem, erode confidence, and limit productivity. The curriculum must therefore play a transformative role in addressing these attitudes and their consequences by fostering respect, empathy, and inclusion.

Despite policy commitments, the effective inclusion of children with disabilities is often hindered by weak implementation. Flexible adaptation of the curriculum to meet varied learner needs remains central to inclusive and special education; however, such flexibility is frequently constrained by limited institutional capacity. Key challenges include inadequate preparedness of mainstream schools, a limited number of special schools with insufficient resources, and gaps in teacher training at both pre-service and in-service levels. Additionally, there is a shortage of need-based learning materials and updated accessible delivery modes at par with global advancements in technology-supported education.

Effective disability inclusion must begin with early identification and robust management through integrated referral systems. Empowering parents with information, equipping teachers with appropriate training, and ensuring access to qualified specialists across public and private sectors are essential components of a responsive system. While the curriculum framework can provide direction and set standards, meaningful inclusion depends on strengthening institutional capacity through adequate resources, enabling flexible adaptations, and ensuring that all learners, including those with disabilities and special needs, can fully participate in the mainstream education system.

Recognizing a spectrum of need, the NCF mandates the development of adapted curriculum versions for learners with severe to profound disabilities, such as significant intellectual disabilities, multiple disabilities, or severe autism spectrum disorders, who may be served in special education centres or inclusive schools with specialized support services. These curricula are parallel, individualized learning pathways aligned with the NCF's broader goals which focus on functional academics, daily living and vocational skills, communication and socioemotional development, the use of Assistive and Augmentative Communication (AAC),

and the integration of therapeutic and health-related objectives into educational plans. The authority for adaptation lies with experts working with special schools and teachers.

Effective inclusion requires robust system-wide capacity building to address both physical and attitudinal barriers. For teacher training, specialized modules in pre-service and in service programs on disability identification, individualized planning, adapted instruction, and positive behaviour support must be developed. For resource provision, guaranteed access to assistive devices, specialized software, accessible learning materials, and therapeutic support must be ensured.

Effective implementation of a disability-inclusive curriculum extends beyond schools into surrounding communities. Structured programmes should be established to support the parents and siblings of children with disabilities by raising awareness of child rights and protection, behaviour management, home-based learning strategies, access to recreational activities, and the use of technology to support children's learning, development and meaningful participation in community life.

Inclusion and equity are not discrete components but foundational principles that shape curriculum design, pedagogy, and assessment across all stages of schooling. By addressing structural barriers, promoting representation, and enabling meaningful participation, the curriculum contributes to building an education system that is right-based, responsive, and reflective of spirit of inclusion at National Level.

9 Non-Formal Education

Non-Formal Education (NFE) constitutes an integral component of Pakistan's education system. It provides alternative and flexible learning opportunities for individuals who have never enrolled in school, have dropped out due to socio-economic constraints, or require adaptable pathways due to age, location, or other barriers.

NCF 2026 recognizes NFE as a key mechanism for the promotion of equitable access to education and for the fulfilment of the constitutional commitment to free and compulsory education for children aged 5–16 years. NFE programmes are designed to offer flexible, accelerated, and context-responsive learning opportunities while maintaining equivalence with national curriculum standards. Key characteristics of NFE include:

- i) Flexible entry and exit points for learners
- ii) Accelerated and condensed curriculum structures
- iii) Learner-centred and context-responsive pedagogy
- iv) Integration of life skills and vocational competencies
- v) Alternative pathways to formal education certification
- vi) Community-based and inclusive learning environments

Through these features, NFE contributes to the expansion of access to education and the improvement of learning opportunities for marginalized populations. At the federal and provincial levels, NFE has made significant progress in terms of policy and planning, the development and implementation of professional development, monitoring, assessment, and data-driven management systems for quality delivery and expected expansion in the future. This, though, is insufficient to meet the requirements. NFE in Pakistan has been facing a range of challenges that restrict its expansion and negatively impact the quality of delivery. One major challenge is compared to the limited funding, which is under 1% of the total education budget in Pakistan, despite the massive number of Out-of-School Children (OOSC), especially those aged 10-16. This level of funding scarcity not only hinders expansion but also negatively impacts effectiveness of policy, planning, human resource development, and the professional development of NFE teachers in Pakistan. At the same time, weak formal and non-formal linkages restrict the learning continuity of learners due to poor mainstreaming, generally because of the non-availability of schools in the formal education sector.

9.1 Rationale for Non-Formal Education in Pakistan

Pakistan continues to face significant challenges in achieving universal access to education, with a substantial number of children and youth remaining out of school due to socio-economic, geographic, and cultural barriers, and with adult literacy below 61%, which is untenable for strong economic growth and development. This stream is central to achieving the constitutional objectives of universal adult literacy and free and compulsory education for all children between the ages of 5 and 16.

Non-formal education (NFE), like all education streams, can be broken down into sub-components: quality of learning, access, equity and inclusion, and governance and management. The key difference is that conventional schooling models alone are insufficient to address these challenges. A typical NFE classroom includes multi-age and multi-grade learners in the same setting, and in the case of adult literacy, the requirements become even more contextual. This makes NFE, in many ways, a more challenging area than formal education.

NFE provides a strategic response by offering flexible entry and exit points, accelerated learning pathways, and contextually relevant curricula. It enables learners to acquire foundational and functional literacy, numeracy, and life skills, while facilitating their transition to formal education, vocational training, or employment.

Alternative Education Programmes (AEPs) and Accelerated Learning Programmes (ALPs) play a critical role in this context by expanding access to education, particularly for out-of-school, over-age, and marginalized learners, and by providing structured pathways for progression and equivalence with the formal education system.

The development of a structured approach to NFE within the National Curriculum Framework (NCF) is essential to ensure alignment with national standards, strengthen coherence among curriculum, pedagogy, and assessment, and enhance the quality and relevance of learning experiences.

9.2 Objectives of Non-Formal Education Curriculum Framework

The objectives of Non-Formal Education (NFE) are subsumed within those of the NCF and the broader educational vision of the country. However, there are some additional components specific to NFE that have been highlighted below:

- i) Provide competency-based, relevant, and inclusive learning opportunities for diverse groups of learners, where diversity includes multi-age children in a given classroom, and prior knowledge is a factor in the application of the curriculum.
- ii) Support flexible and accelerated learning pathways to address the needs of out-of-school and over-age learners. This is at the core of the curriculum framework for NFE and represents its main challenge.
- iii) Ensure equivalence and alignment between Non-Formal and Formal Education systems to facilitate learner mobility and continuity of learning. Mobility includes the possibility for the learner to be mainstreamed into formal schools or to move directly into the world of work with enhanced capacities.
- iv) Integrate life skills, vocational competencies, functional literacy and numeracy, and digital literacy to enhance employability and lifelong learning. While these are optional integrations (except for digital literacy) in formal schools, in NFE they are mandatory components.

Other objectives of the NFE curriculum framework overlap with the overall educational vision and objectives of the NCF. These include:

- i) Strengthen coherence among curriculum, pedagogy, and assessment practices, and ensure effective implementation through evidence-based and timely actions.
- ii) Promote holistic development across linguistic, cognitive, physical, socio-emotional, moral, and spiritual domains, as well as ensure child protection by curbing abuse, neglect, exploitation, and discrimination.
- iii) Contribute to national development priorities and global commitments, including inclusive and equitable quality education.

9.3 Guiding Principles for NFE Curriculum

Similar to the objectives of Non-Formal Education (NFE), the guiding principles also have a common overlap in the overall National Curriculum Framework (NCF) 2026, as well as specifics relevant to the stream. The main principle that differentiates formal from non-formal education is that of flexibility and acceleration of learning.

The employment of this principle means that curriculum design will enable flexible learning pathways, allowing learners to complete educational stages in shorter durations without compromising learning outcomes. Flexibility includes setting up classrooms at the doorsteps of learners and offering timings that are suitable to most learners, with consideration for safety and security. This flexibility is key to NFE and paves the way to accommodate learners' needs, which attracts enrolment and improves retention and learning outcomes.

The principles of equity and inclusion, as well as learner-centred and competency-based learning, are also essential. The application of these principles in the case of NFE is adapted to the learner's profile and needs. Firstly, out-of-school children and adults without literacy are already among the most marginalized in education. This adds to vulnerabilities that need to be recognized in the packaging of the curriculum, the content, and pedagogical (and andragogical) approaches. Teachers, similar to those in formal education, need to be trained to identify such vulnerabilities and adapt the curriculum and instruction accordingly, but in line with the more complex requirements of an NFE classroom.

In addition to a learner centred focus on conceptual understanding, critical thinking, and problem-solving approaches tailored to learners' age the importance of prior knowledge, and context is enhanced in the case of NFE. Curriculum implementation, therefore, will particularly ensure that learners are central in NFE, and that their prior learning, age, and contexts are factored into the content and teaching methods applied in the classrooms.

9.4 Learning Stages and Programmes

NFE is organized into progressive learning stages aligned with the formal education system to ensure equivalence and facilitate learner mobility, while also creating space for provincial adaptation and contextualization. Furthermore, the NFE curriculum proposes basic literacy and integrated literacy and skills (ILS) models for low-literate youth and adults, focusing on foundational literacy, numeracy, life skills, and income-generating skills. These stages are

guided by the NCF 2026, with the proviso that the timeframes for each are condensed in the case of NFE.

- i) **Lower Primary Stage:** Focus on basic literacy, numeracy, and early learning competencies.
- ii) **Upper Primary Stage:** Expansion of foundational skills and introduction of structured subject learning.
- iii) **Middle Stage:** Development of conceptual understanding, analytical thinking, and introduction to vocational skills.
- iv) **Secondary Stage:** Advanced learning, skill development, and preparation for higher education, vocational training, or employment.

Table 1 explains the details of each stage of Non-formal Basic Education (NFBE) and ALP. These include the relevant package, duration and age cohorts. These timeframes as seen in the table are reduced from the years allocated in formal education.

Table 3: Learning Stages in NFE

Learning Stages and Focus	NFBE	ALP	Duration	Age cohorts
Primary Education [Lower and Upper Primary Stage] - Pre-reading → Decoding and fluency	Katchi* and Grade 1	Package A	24 months – 42 months	5-16 years
	Grades 2-3	Package B		
	Grades 4-5	Package C		
Middle Education - Reading to Learn	Grades 6-8	Package D & E	18 months	10-16 years
Secondary Education - Analytical → Transformative Reading	Grades 9 and 10	Package M	12 months	13-18 years

**Katchi is the traditional pre-primary class that function in all government primary schools. The teaching in these classes is not based on the modern precepts of early childhood education. In many other schools ECCE has been introduced and the two systems function in parallel.*

Through these packages, ALPs enable learners to complete these stages in condensed timeframes while maintaining equivalence with formal education standards. This structure supports transitions between non-formal and formal pathways and promotes continuity in learning. Key considerations for the development and functionality of the above packages are:

- i) Integration of skills and technology
- ii) Assessment alignment

9.4.1 Integration of Skills and Technology

Life skills, vocational competencies, and digital literacy will be integrated to enhance employability and lifelong learning. The curriculum for basic education and adult learning should integrate market-relevant and employable vocational skills, as well as promote the use of digital technology that helps expand learning. Age (and culturally) appropriate skills and technology help in promoting the learning, knowledge, and skills necessary for enhancing individual productivity, contributing to socio-economic support for families, and development of human capital.

9.4.2 Assessment Alignment

Assessment approaches will be aligned with curriculum objectives and support equivalence with formal education certification systems. Assessment in NFE may be considered critical and should be conducted in the true spirit of the approach. It should also be used to improve curriculum, learning materials, and classroom practices, as well as teachers' professional development practices.

9.5 Curriculum Design Principles in NFE

The high level design and development principles of NFE curricula are the same as those for the overall NCF. However, their application is more complex in the context of NFE. These principles include:

- i) Vertical and horizontal alignment.
- ii) Balance of breadth and depth.
- iii) Integration of cross-cutting competencies.

Since NFE proposes education in condensed and shorter durations, vertical and horizontal alignment is critical to reducing the time required for each grade. In primary education, which is offered over 24 months, Package A is a blend of Pre-primary (Katchi) and Grade 1, Package B is a blend of Grades 2 and 3, and Package C is a blend of Grades 4 and 5. Similarly, in middle education, Package D is a combination of Grades 6 and 7.

At the primary level in NFE, Packages A and B offer three major subjects: Urdu, English, and Mathematics. These packages include the learning standards and outcomes of all other subjects, such as General Knowledge, General Science, and Social Studies. This demonstrates how horizontal alignment across subjects in NFE helps combine similar learning outcomes and

content, saving time on teaching them while enabling learners to attain multiple competencies simultaneously.

Decisions on breadth and depth are made according to the learner's age, background, prior knowledge, culture, and the learning outcomes expected at a particular educational level or cycle. Curriculum experts can make decisions accordingly and propose a balanced curriculum, which is then implemented fairly by teachers in the classroom. Teachers can further make decisions about their instruction based on the learners' characteristics.

The integration of cross-cutting competencies is similar to that in formal education, with increased emphasis on integrating vocational courses and relevant skills. This will provide learners with opportunities to acquire marketable and employable skills. Critical thinking, communication, collaboration, creativity, problem-solving, digital literacy, and citizenship—similar to formal education will be embedded across all learning areas.

9.6 Subject Curriculum Framework

A Subject Curriculum Framework provides the overall structure, purpose, and direction for teaching and learning in a specific subject. It serves as a guiding reference for NFE/ALP curriculum developers, teachers, assessment bodies, and textbook developers. The framework integrates conceptual foundations with practical guidance to ensure coherence, progression, and national consistency while allowing contextual flexibility. Additionally, there are commonalities with the Framework for formal education, as well as additional requirements for NFE. The latter include:

- i) Delivery in accelerated timeframe
- ii) Context of NFE
- iii) NFE Infrastructure and facilities
- iv) Subject overview
- v) Other Areas

9.6.1 Delivery in Accelerated Timeframe

Each subject and corresponding contents will be delivered in an accelerated time frame as required by the ALPs without harming the expected competence.

9.6.2 NFE Context

Realizing a fact that the subjects are part of the larger NFE/ALP courses/programmes and its recipients are diverse group of children whose learning are slightly different than those enrolled in formal schools. The learners may be overage, possess prior-knowledge, possess different real life experiences, etc. therefore the principle of diversity of the clients should be adhered by all means.

9.6.3 NFE Infrastructure and Facilities

The principles must consider that subjects will be implemented in limited infrastructure – often a single room. Within the classroom the teacher will deliver the lesson to a range of children with diverse backgrounds, ages and different learning experiences.

9.6.4 Subject Overview

Describes the role and significance of the subjects within Pakistan’s education system and NFE settings and contribution to learners’ intellectual, personal, social, and civic development, and alignment with national education goals and global competencies.

9.6.5 Other Areas

Other areas in subject curriculum framework that overlap with NFE include pedagogical orientation, coherence and progression, relevance, flexibility, and competency orientation. Application details may vary according to a particular NFE setting.

9.7 Delivery of NFE Programmes

NFE programmes may be delivered through diverse and flexible modalities to ensure access and continuity of learning:

- i) **Face-to-Face Learning:** Community-based learning centres providing interactive and facilitated instruction.
- ii) **Digital Learning:** Use of technology-enabled platforms, mobile applications, and digital resources to expand access.
- iii) **Hybrid Models:** Blended approaches combining in-person and digital learning to enhance flexibility and resilience.

The NFE programmes define delivery of curriculum, teaching & learning materials according to a Scheme of Studies and academic calendar. Classroom delivery is through varied teaching

and learning methodologies. Monitoring and mentoring is conducted through live classroom observation, data management, assessment & certification and engagement of local communities in NFE.

9.8 Linkages with Formal Education and National Development Goals

NFE plays a critical role in complementing the formal education system by expanding access, facilitating re-entry into formal schooling, and supporting lifelong learning pathways. It contributes significantly to national priorities by:

- i) Expanding access to education for underserved populations
- ii) Supporting transition between non-formal and formal pathways
- iii) Ensuring equivalence of learning outcomes
- iv) Integrating vocational skills and livelihood opportunities
- v) Promoting inclusive and lifelong learning

Table 4: Linkages Matrix between Formal and Non-Formal Education

NFE/ALP Models	Packages/Grades	Transfer/Mainstreaming or Transition to Formal Education
NFBE or ALP (Primary)	Package A (Pre-primary (Katchi) & Grade-1) Package B (2 & 3 Grades) Package C (4 & 5 Grades)	Transfer/ mainstreaming in equivalent grade in formal education during the course before completion through internal assessment and certificates Transition to middle level after completing Package C/ Grades 5 through terminal assessment and certification
NFBE or ALP (Middle and Middle-Tech)	Package D (6 & 7 Grades) Package E (Grade 8)	Transfer/ mainstreaming in equivalent grades in formal education during the course before completion through internal assessment and certificates Transition to secondary level after completing Package E/ Grade 8 through terminal assessment and certification Transition to vocational skills (equivalent level) after assessment and certification

NFBE or ALP (Matric and Matric-Tech)	Grades 9 & 10	Transfer/ mainstreaming in equivalent grades in formal education during the course before completion through internal assessment and certificates Transition to higher secondary level after completing the programme through terminal assessment and certification Transition to vocational skills (equivalent level) after assessment and certification
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9.9 Implementation of NFE Curriculum

NFE curriculum will propose guidelines and instructions for the following for effective implementation of the NFE curriculum:

- i) Guidelines for material/learning resource developers (Authors/ textbooks writers aligned with national/ provincial standards and guidelines of respective textbook boards/ authorities)
- ii) Guidelines for developing teaching & learning strategies (teacher preparations by following standards for learners, teachers and learning environment, in collaboration with provincial teacher education and training authorities/ organizations and CPD systems)
- iii) Guidelines for assessment of the NFE curriculum (aligned with assessment standards, and respective area guidelines and best practices, under federal/ provincial NFE assessment & certification systems)
- iv) Guidelines to adapt curriculum/ contents and strategies for children with special needs
- v) Guidelines for delivery options/ implementation of NFE in field
- vi) Guidelines for dissemination of the curriculum

Detailed programme structures, including accelerated learning models, subject offerings, duration, assessment, and certification mechanisms, are elaborated in the NFECF and related implementation guidelines.

SECTION 3

Implementation Structures and Value Chain

10 Implementing the Curriculum

This chapter outlines the structures and processes that will ensure that the curriculum roll-out, implementation, and review are effective. The NCF provides the guiding principles for undertaking these tasks. The curriculum is viewed not as a static document but as a dynamic and evolving framework that requires continuous implementation support, monitoring, review and refinement. Implementation requires governance structures for oversight and review, as well as processes to ensure the completion of actions and steps toward the eventual teaching of the curriculum in the classroom. The governance structure has a national component, which has evolved through voluntary cooperation among provinces and the federal government, and a local system in each province adapted as per context. The NCF unpacks the implementation process of the value chain in the first part, and in the second half of this chapter, it suggests governance structures at the national and provincial or regional levels. The latter is a suggested guideline.

10.1 Implementation Processes

A curriculum, like all policy documents, is implemented along a value chain that includes textbook development, teacher orientation (allowing for contextual adaptation across diverse educational settings, including formal and non-formal systems), assessment and examinations, and mechanisms for monitoring, feedback, and continuous improvement. Effective curriculum implementation requires alignment between what is intended in the curriculum, what is taught in the classrooms, and what is assessed through examinations and other means. This means an alignment across curriculum objectives, textbooks and learning materials, pedagogy, assessment systems, monitoring mechanisms, and system capacity. Weakness in any one of these will affect the quality and impact of the curriculum as a whole.

Additionally, effective curriculum implementation requires strong coordination between institutions that form part of the curriculum value chain including, curriculum authorities, textbook boards, teacher training institutes, assessment bodies, education departments, and the universities. Lack of effective coordination ends up negatively impacting the quality of implementation. Therefore, clearly defined coordination mechanisms should be established for regular communication and collaborative planning to support effective curriculum implementation.

The expectations of the education system are that every learner reaches, at least, the standards of learning prescribed in the official curriculum and that some may even exceed them. This expectation is aspirational, and if robust processes are in place, then over time the gap between the official and the learned curriculum is minimized for all learners. Success depends on the quality of each component of the value chain and the design of the curriculum itself.

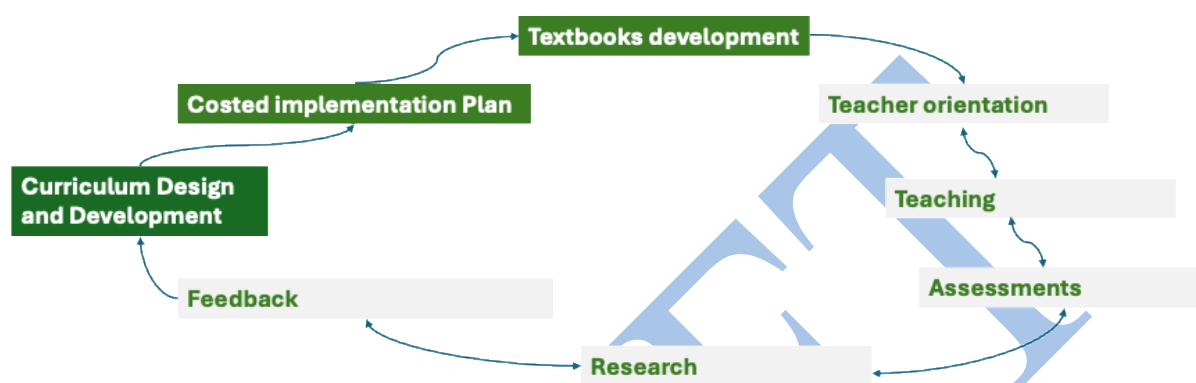


Figure 5: Curriculum Implementation Process

The strength of each component depends on the systems in place to develop these products and continuously improve them, including the curriculum. These changes are not possible without a proactive approach to implementation of the curriculum through the strengthening of the value chain. Like all policies, to ensure successful implementation, a curriculum must be accompanied by a Curriculum Implementation Plan (CIP) built on the requirements for successful implementation. The CIP operationalizes curriculum expectations through actionable strategies, timelines, resource requirements, and implementation responsibilities. This plan is not limited to the value chain itself. No plan is complete without a monitoring and feedback component that is informed by data, research, and the input of professionals involved in various parts of the value chain and academia. This completes the curriculum implementation process.

10.1.1 Curriculum Implementation Plan

The curriculum will be introduced through phased implementation covering all critical elements of the value chain. Phased implementation will allow education systems to gradually strengthen institutional capacity, orient teachers, develop quality learning materials, and address implementation challenges along the way. The first step after finalisation of the curriculum will be to prepare a plan for its implementation. A CIP comprises the standard components: resource requirements, costs, timelines, and a monitoring mechanism based on

defined progress timelines and indicators to measure that progress. Figure 6 below shows the main resources that need to be targeted for improvement in the plan; however, it does not exhaust the details.

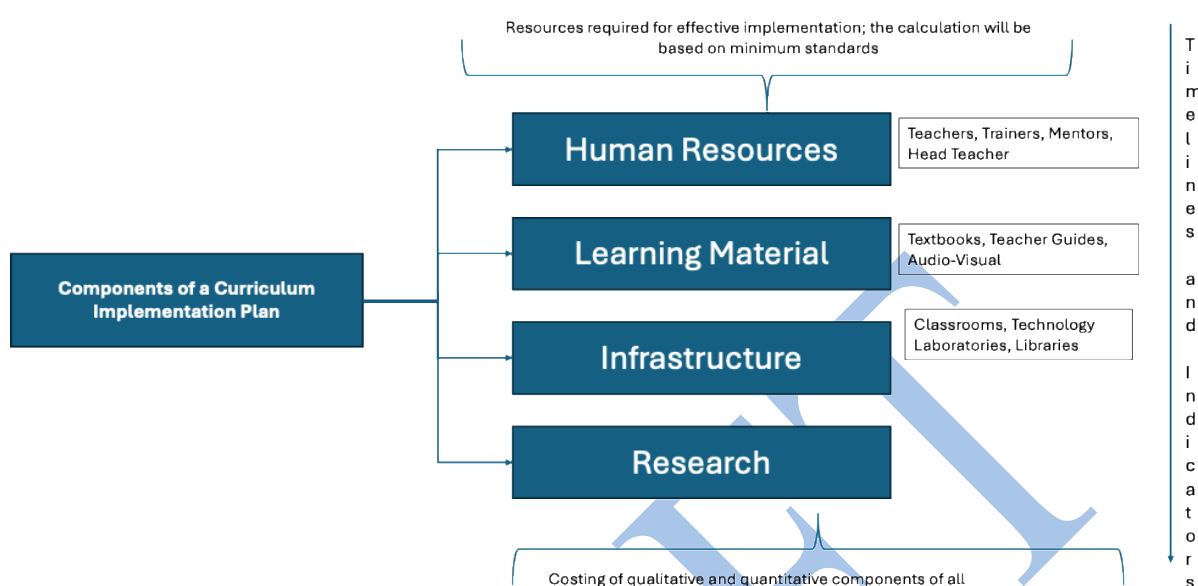


Figure 6: Components of a Curriculum Implementation Plan

The purpose of the plan is to connect curriculum implementation with the ground realities. No curriculum can be implemented if the resources fall below a certain minimum. These minimal requirements will be identified in the curriculum document for each subject and grade. These include qualitative benchmarks of teachers, head teachers, trainers and other human resource, textbooks and other learning material, assessments and examinations and infrastructure. Infrastructure includes number of classrooms, technology integration as per requirements of the curriculum, laboratories and libraries. It can include other facilities too.

The plan spread of the period of implementation will indicate timelines for the qualitative and quantitative enhancement of resources. An element of research will be costed and included in the plan to ensure there is regular feedback for improvement of the implementation process and the curriculum cycle. The plan will include indicators at different levels not only to ensure timely and efficient implementation but also to measure the impact of the curriculum in terms of learning outcomes across various domains. This means there will be indicators at the input, output, and impact levels, with clear timelines and targets for achievement.

10.2 Curriculum Revision

Information produced and collated during the implementation process will be employed in revision of the curriculum. This information, however, will not be the only source to be utilised. It will form a subset of the diagnostics to be designed and completed for each revision. In

addition to lessons learnt from the implementation process, NCF suggests collection of additional data to ensure that the curriculum remains relevant to evolving learner needs, societal priorities, national vision, and system capacities. This supports the premise that curriculum reform should be evidence-based and continuous rather than a one-time exercise.

The revision process will be including two steps:

- i) Situation Analysis and Needs Assessments
- i) Curriculum Design and Development

10.2.1 Situation Analysis and Needs Assessments

This foundational stage establishes the evidence base and direction for curriculum design. It involves a comprehensive analysis of the following. The information collected during the implementation period will be augmented through a suggested tool provided at **Annex-VII**:

- i) Learner profiles, including age, prior knowledge, language, learning needs, and barriers (including out-of-school and non-formal contexts)
- ii) Social, cultural, economic, geographic, and environmental contexts
- iii) National development priorities, labour market demands, and future skills requirements
- iv) Existing curriculum frameworks, policies, and implementation gaps
- v) Teaching and learning conditions, including teacher capacity, infrastructure, and resource availability
- vi) Equity and inclusion dimensions, including gender, disability, socio-economic, and regional disparities
- vii) Stakeholder perspectives, including teachers, learners, parents, communities, employers, and policymakers
- viii) Available financial, human, and institutional resources

This stage is guided by both quantitative and qualitative evidence (e.g., enrolment, retention, and learning outcomes) and results in the identification of key challenges, opportunities, and priority areas. The evidence will provide a clear rationale for curriculum design.

To receive robust and relevant feedback, curriculum authorities will establish a system of data collection using a variety of tools (e.g., surveys, observation protocols, and review templates) as part of the implementation process and also, if needed, employ additional methods. Data will be gathered to ensure reliable feedback from teachers, students, parents, experts, and

institutions. This data will be analysed and triangulated to identify patterns, strengths, gaps, and equity issues across regions, informing curriculum-related decisions including both implementation gaps and deficiencies in curriculum design. Research will broaden the information base and strengthen the feedback.

Feedback will be used to refine learning outcomes, benchmarks, teaching materials, and assessment practices, as well as to identify and remove barriers to implementation. All proposed changes will be clearly communicated to stakeholders to support transparency and effective implementation.

10.2.2 Curriculum Design and Development

Based on the situation analysis, curriculum frameworks, standards, strands, benchmarks, competencies, student learning outcomes, content structures, and assessment approaches will be developed, ensuring alignment with national priorities, learning stages, and desired learner outcomes. They will address identified gaps, incorporate emerging knowledge and technologies, and respond to changing societal and economic needs.

10.2.3 Proposed Timeline for the Curriculum Cycle

Internationally, high-performing systems use an iterative cycle rather than a one-time reform approach, ensuring that curricula remain relevant, evidence-informed, and adaptable to changing societal needs. While specific models vary across countries, the core stages of the curriculum cycle are widely consistent and interdependent. The following timelines, in Table 3, were suggested in the NCS 2026 to complete the cycle for different subjects and learning areas:

Table 5: Curriculum Cycle for Different Subjects

Activity	Subjects	Timeline
Situation Analysis	Languages Religious Studies	After 3 annual assessments
	Social Sciences	After 3 annual assessments
	Natural Sciences	After 2 annual assessments
	Vocational and Technical	After 2 annual assessments
	Computer studies/Digital contents Mathematics Overarching competencies Cross cutting themes	After 1 annual assessments
	Other learning areas	After 1 year based on expert opinion

Curriculum design and development (draft)	All subjects	06 months
Collecting feedback on draft curriculum from relevant stakeholders/ federating units	All subjects	03 months for each subject
Finalization of curriculum, based on feedback	All subjects	03 months for each subject
Approval of curriculum and notification for large scale implementation	All subjects	03 months for each subject
Training of teachers on new curriculum before large scale implementation	All subjects	06 months for each subject
Development, review, approval and printing of textual/learning materials	All subjects	12 months for each subject
Monitoring of curriculum implementation and Assessment.	All subjects	A continuous feedback mechanism is to be in place. It should collect data from students, parents, teachers, heads and educational managers. Annual reports will be prepared
Evaluation and Review/Revision	All subjects	03 months for evaluating assessment findings 06 months for review and revision

The above timelines may change as information processes established for implementation produce data that suggest a different cycle.

10.2.4 Institutionalisation of Curriculum Review

To avoid random review of the curriculum and provide a systemic method for revisions, national curriculum review process will be institutionalized through rules approved by competent forum. Institutionalising of curriculum review will help ensure continuity and transparency in the curriculum reform process. The rules will make curriculum revision and implementation more institutionalized. The key components of the rules will be:

- i) The timing or periods for curriculum review, which will be based on empirical evidence and the need for addition of any emerging areas.
- ii) Timelines for review of various subjects, which may vary. For example, the timelines for revision of technology-based subjects will be shorter than languages.
- iii) A standardised process for review that will include diagnosis and learner-centred processes for the development of scheme of studies, subject curricula, and flexible learning pathways.
- iv) Standardised qualifications for persons included in review of curriculum will be mentioned in the rules. This may again vary according to subject but will be notified for each as per need.

10.3 Governance Structures

The governance structure here is explained at two levels: the federal-interprovincial structures and the implementation level. These structures for curriculum revisions, approval, and implementation have continually evolved over the decades. Curriculum revisions and approvals have been determined nationally in the last few iterations, despite the change in the legal status of the Federal government's role in education after the 18th Constitutional Amendment. There has been no institutionalisation of the process and, therefore, the area of federal-interprovincial management of curriculum cannot be assumed to repeat the experiences of recent years. It remains an area of voluntary compliance. The structures for implementation at the individual provincial and area governments levels are less complex but suffer from weaknesses.

10.3.1 Federal-Interprovincial Process

The only method for national determination of curriculum revision and approval is through voluntary agreement among the federating units and the Federal government. The stakeholder feedback received during the development of NCF 2026 supported the inclusion of at least a core common element in all curricula. This led to the development of the "Core-Plus Principle."

Therefore, NCF 2026 supports this principle, but only within the bounds of the Constitution. This means it can be employed only if voluntarily agreed upon by all provinces and the Federal government.

As explained earlier in Chapter 2, the 18th Constitutional Amendment redefined the governance of education in Pakistan. Prior to the amendment, the Federal government held primacy over curriculum, standards, policy, and Islamic education, while provinces were responsible for delivery, including planning, textbook development, teacher recruitment, school management, and monitoring. Following the amendment, these federal roles were devolved to the provinces, granting them autonomy to design and deliver education within the broader constitutional framework.

Over time, the need for national coherence, comparability of learning outcomes, and shared minimum standards emerged across provinces and the Federal Government. Collaborative federalism evolved through voluntary cooperation among all federating units for functions requiring a national response. This led to the revision of the national curricula in 2020 and 2023. To return to a nationally agreed curriculum, the process suggested below will need to be approved by the Inter-Provincial Education Ministers' Conference (IPEMC) as the lead body for national coordination of education, including curriculum.

For a national process of curriculum review, the following steps will be required:

- i) Approval of the National Curriculum Framework (NCF) and the Core-Plus principle for the development of a national curriculum that allows provincial flexibility while promoting national cohesion, by the Inter-Provincial Education Ministers' Conference (IPEMC).
- ii) A meeting of the curriculum authorities of all provinces and the NCCW to formulate and agree on the operational unpacking of the Core-Plus principle.
- iii) Revision of the national curriculum under the oversight of the NCCW.

The NCCW will be responsible for developing technical reports and preparing working papers and agenda items for submission to IPEMC, in order to facilitate informed deliberation and consensus-building among federating units on the approval of the NCF and the succeeding steps.

10.3.2 Governance of Implementation

The provinces will have their own oversight mechanisms, structured individually and autonomously by each. The feedback process will include progress in private schools. All private schools will be required to report on the core national components. While, as mentioned above, each respective government will design its own mechanisms for oversight and monitoring, NCF 2026 suggests some guidelines that will help in design and national reporting mentioned in the next section:

- i) The oversight body should meet at least once in 6 months and be headed by, at least, the secretary of education.
- ii) The respective curriculum authority should function as the secretariat to the oversight body.
- iii) Planning and development and finance departments should be included in the oversight body (and at the time of development of the Curriculum Implementation Plan).
- iv) At the decentralized level, district education officers or equivalent will send monthly reports on implementation to the higher authorities in the respective education departments and the relevant curriculum authorities.
- v) The original CIP and its implementation status after every year, will be published on the website of the respective provincial education department.

The above guidelines can be modified and expanded upon as per the context of each province.

10.3.3 Implementing the Core-Plus Principle

The Core-Plus principle means that implementation in the provinces will have two components: the national core and the contextual part of the design adapted as per need by each province. Annual reports compiled by the provinces on implementation of the core will be presented in IPEMC, as the oversight at the national level, to review progress within the contours of the principle of Core-Plus. The forum can also be used for experience-sharing of the “Plus” component where lessons can be learnt from innovation and approaches of different federating units.

11 Textbooks and Learning Materials

In the Pakistani public sector education system, textbooks often function as the primary and in many cases, the only instructional resource available to teachers and learning resource for learners. Their role, therefore, extends beyond content provision. Textbooks act as the main vehicle through which the curriculum is interpreted, organised and enacted in classrooms. Development of textbooks constitutes the first step in the roll out of the curriculum along the value chain.

11.1 Importance of Textbooks

For learners, textbooks provide a coherent pathway for understanding concepts, practicing skills and progressing across levels. They present content in an organised manner, supported by explanations, examples, activities, and opportunities for reflection and assessment. For teachers, particularly in contexts where professional support may be limited, textbooks serve as a practical guide for instruction by supporting sequencing, pacing, classroom activities and approaches to assessment. In this way, textbooks help bridge the gap between curriculum design and classroom practice, shaping both teaching and learning processes.

In recognition of their systemic importance, textbooks and learning materials need to be developed, reviewed, approved, and used in accordance with clearly defined quality standards and regulated processes. These processes ensure alignment with curriculum intent, adherence to quality benchmarks, transparency in development and approval and consistency across provinces while allowing for contextual adaptation.

11.2 Learning Materials

Learning materials include a range of resources that support the effective implementation of the curriculum alongside textbooks. These comprise workbooks, teacher guides, teacher editions of textbooks, supplementary reading materials, and other supporting resources such as visual aids, activity materials and digital content. Together, these materials support different modes of learning and enable a more comprehensive approach to teaching and learning.

In the Pakistani context, teaching and learning in many public schools continue to rely heavily on textbooks as the primary and often the only instructional resource. While textbooks provide a structured framework for organising teaching and learning across the academic year, they are not sufficient on their own to support the full range of instructional and learning experiences

envisioned in the curriculum. Effective learning requires opportunities for observation, interaction and application. The inclusion of a broader set of learning materials is therefore important to enable more engaging, inclusive, and meaningful classroom practices.

Workbooks provide structured opportunities for practice and consolidation of learning. They support the development of skills, reinforce concepts and enable learners to apply their understanding through guided tasks and exercises.

Teacher guides or teacher editions are critical for supporting effective classroom implementation. They provide step by step guidance on lesson planning, pedagogical approaches, sequencing of content and assessment of learning, enabling teachers to use textbooks more effectively and adapt instruction to diverse learner needs. They also contribute to teachers' professional learning by strengthening understanding of content, pedagogy and assessment.

Supplementary reading materials including storybooks and informational texts extend learning beyond the core textbook. They support language development, promote reading for understanding and expose learners to a wider range of ideas and contexts, which is particularly important in developing literacy across subjects and exposure to learning perspectives beyond the textbook.

Other learning resources such as visual aids, charts, maps, models, manipulatives, and simple activity materials play an important role in supporting understanding, especially in early grades and in concept-based learning. These resources help make abstract ideas more concrete, support different learning styles and encourage active participation. Learning may also be enriched through engagement with the local environment and community where appropriate. Where feasible, curated digital resources may be used to extend access to information and support learning beyond the classroom.

The inclusion of diverse learning materials within the NCF 2026 recognises the need to move beyond a textbook-dependent approach and supports a more balanced and flexible model of teaching and learning. Together, these resources enhance learner engagement, support varied pedagogical approaches, and contribute to improved learning outcomes across different contexts. This is particularly important in ECCE and early primary stages where learning is largely activity-based and relies more on materials and interaction than on text.

11.3 Issues with Textbooks and Learning Materials

Despite their central role, textbooks often face a number of challenges that limit their effectiveness. In some cases, textbooks may not adequately reflect the intent of the curriculum, while in others they may over-extend it, becoming content-heavy and focused on coverage rather than depth. This can lead to rote memorisation rather than conceptual understanding and meaningful application. There are also concerns related to alignment, including weak sequencing and the inclusion of unnecessary or poorly structured content.

Textbooks may provide limited support for active learner-centred approaches and instead reinforce teacher-centred practices through dense text and an overemphasis on recall-based questions. Opportunities for inquiry, discussion, application and higher-order thinking may be insufficient. In addition, complex language and dense presentation can make content difficult to access, especially for younger learners or those in multilingual contexts.

Concerns around inclusion and representation also persist, with insufficient reflection of diversity and, at times, implicit biases. Textbooks may also lack contextual relevance, reducing connections to learners' real-life experiences and local environments.

Beyond textbooks, the availability and use of other learning materials remain limited in many classrooms. Workbooks, teacher guides, supplementary reading materials and visual or activity-based resources are often not consistently available or effectively utilised. This restricts opportunities for practice, reinforcement and experiential learning, particularly in early grades where such materials are essential.

At the system level, challenges such as delays in development and distribution, insufficient piloting and feedback mechanisms and inadequate teacher orientation continue to affect the effective use of materials. Addressing these issues requires stronger alignment with curriculum intent, more rigorous development and review processes and continuous refinement based on evidence from classrooms.

11.4 Qualities of a Good Textbook

The quality of textbooks plays a critical role in determining how effectively the curriculum is translated into classroom practice. Given their central place in the teaching and learning process, it is important to articulate clear expectations of what constitutes a good textbook. The following qualities provide a common reference for the development, review and use of

textbooks and learning materials, ensuring that they are aligned with curriculum intent, responsive to learner needs and supportive of effective pedagogy across diverse educational contexts.

11.4.1 Alignment with Curriculum and Learning Progression

A good textbook supports effective teaching and meaningful learning by translating curriculum expectations into clear, structured and engaging learning experiences. It is closely aligned with curriculum outcomes and progression across stages, ensuring coherence and relevance.

11.4.2 Content Organisation and Conceptual Clarity

Content is organised in a logical and systematic manner, moving from simple to complex ideas and supporting conceptual understanding. It draws on authentic, meaningful and relevant material, presented through clear explanations, well-chosen examples and real-life applications that help learners connect new knowledge to their own experiences. Each chapter follows a consistent structure, with clearly identifiable sections such as introduction, development of ideas, practice, and reflection enabling learners to engage with content in a familiar and predictable way.

11.4.3 Child-Friendly and Engaging Design

The design is age-appropriate and aligned with the developmental stage of learners. In early and primary grades, greater emphasis is placed on visual elements, illustrations and activity-based layouts to support comprehension, engagement and concept formation. In higher grades, the design becomes more structured and text-supported, with visuals used purposefully to explain concepts, represent data, and support analysis rather than serve a purely decorative function. Illustrations, diagrams, tables, and other visual elements are pedagogically aligned with the content and contribute to understanding. Features such as snippets, short facts and contextual examples are used selectively to enrich learning, maintain interest and support connections with real-life contexts.

11.4.4 Support for Active and Inquiry-Based Learning

A good textbook promotes active and inquiry-based learning, providing a variety of tasks and activities that support observation, exploration, discussion, problem-solving, and critical thinking. These activities are integrated within the text as well as at the end of sections to reinforce and consolidate learning.

11.4.5 Support for Assessment for Learning

A good textbook provides continuous opportunities for assessment through a range of question types and tasks that address knowledge, skills, and attitudes and support both practice and reflection. These include short responses, open-ended questions, application-based tasks, problem-solving activities, and opportunities for discussion and reflection. Assessment reflects a balanced approach, progressing from understanding and application to higher-order thinking, enabling learners to demonstrate both depth of learning and conceptual clarity.

11.4.6 Language and Accessibility

The language used is clear, age-appropriate, accessible, and enables learners to engage with content effectively while gradually developing subject-specific vocabulary and understanding. It supports comprehension through well-structured sentences, appropriate use of terminology and, where needed, clear explanations of new concepts. The language also considers diverse learner backgrounds, including multilingual contexts, to ensure that all learners can meaningfully access and engage with the content.

The language used in all subjects should be aligned to the benchmarks defined in the language ladder for the given grade. All textbooks will be reviewed by a lead language curriculum developer for consistency with the benchmarks.

11.4.7 Support for Teachers

A good textbook supports teaching by providing a coherent structure that helps organise instruction, sequence learning, and manage pacing across lessons. It embeds learner-centred approaches through the sequencing of content and the integration of tasks, interaction, reflection, and assessment, thereby supporting teachers in translation of curriculum intent into effective classroom practice while allowing flexibility for adaptation to different classroom contexts.

11.4.8 Inclusion and Representation

A good textbook is inclusive and free from bias. It represents diverse cultures, genders, regions, and abilities in a balanced and respectful manner. The content supports inclusion through the use of stories, characters, examples, and contexts that reflect the diversity of learners and their lived experiences.

11.4.9 Integration of Values, Cross-Cutting Themes and Interdisciplinary Learning

A good textbook supports holistic learning by integrating values, cross-cutting themes, and interdisciplinary connections within subject content in a meaningful and coherent manner. It reflects national priorities, cultural heritage, and shared values and supports the development of responsible, ethical, and informed learners.

11.4.10 Digital and Supplementary Materials

Where applicable, a good textbook is complemented by digital formats and supplementary materials that extend and enrich learning. Digital versions and associated resources should maintain the same standards of curriculum alignment, pedagogical quality and accessibility as the print edition and should be designed to function effectively across varied levels of technology access.

11.5 Textbook and Learning Materials Development Process

In Pakistan, textbook development is led by provincial textbook boards and by the National Book Foundation (NBF) at the Federal level, in accordance with approved curriculum frameworks. Textbook boards and NBF may develop textbooks internally or engage approved publishers for development. In all cases, textbooks and curriculum authorities apply quality assurance mechanisms and review and approve textbooks to ensure alignment with curriculum standards, quality expectations and learning goals. While institutional arrangements may vary, a set of core process steps ensures coherence, quality and effective classroom use of textbooks and learning materials.

11.5.1 Curriculum Mapping and Planning

The process begins with a systematic mapping of curriculum standards, benchmarks, and SLOs to define the scope, sequence, and progression of content across grades and stages. This includes identifying key concepts and the expected depth of learning at each level to ensure alignment with stage-wise progression. It also includes decisions on distribution of SLOs between text and chapter assessments.

A key component of this stage is the distribution of SLOs across units and chapters with the objective that all outcomes are appropriately covered without duplication or overload. Related SLOs are clustered and sequenced logically in line with the structure of the textbook.

11.5.2 Development of Textbook Framework and Approach

A clear textbook framework is developed at the outset to guide writing and design. It establishes the structure of units and chapters, the sequencing of topics, and the overall pedagogical approach. This includes determination of style and approach, for example, whether the textbook will be organised around inquiry-based, concept-based or thematic principles. It is important to ensure that these decisions are consistent and intentional across the textbook. The framework defines how concepts will be introduced, developed and reinforced across chapters and gives careful consideration to the approach to embed assessment. This includes the types of questions to be used and the balance between recall, application and higher-order thinking. The role of activities, projects, and tasks in supporting inquiry, discussion, and problem-solving is also outlined at this stage.

Settling these decisions early allows consistency in how learning is presented and experienced throughout the textbook. For instance, a primary science textbook may be organised around guiding questions that lead learners through activities, observations and reflection, or it may follow a concept-based structure where ideas are directly introduced and developed through examples, explanations, and practice. Whichever approach is chosen, the framework ensures it is applied coherently and purposefully from the outset. It also becomes a guide for the teams of authors to ensure uniformity of style.

11.5.3 Formation of Multi-Disciplinary Development Teams

Textbooks are best developed through the collaborative work of a team of experts rather than exclusive reliance on a small number of subject experts. Textbook development therefore involves contributions from multiple areas of expertise, as the required capacities are not typically available within a single specialisation.

While subject experts ensure conceptual accuracy, curriculum specialists support alignment with standards and progression, teachers contribute by bringing insights from classroom realities and feasibility of the approach, language experts ensure subject specific clarity of expression and age-appropriate communication, and designers contribute to visual presentation and design. A collaborative approach helps ensure that the textbook is not only accurate but also pedagogically sound, developmentally appropriate, and usable in diverse classroom contexts.

11.5.4 Author and Reviewer Orientation and Capacity Building

Authors and contributors are oriented to curriculum expectations, learning progression, pedagogical approaches, and textbook design requirements including the instructions in the style guide². This includes familiarisation with the agreed textbook framework and approach, which includes chapter structure, sequencing of content, use of language and overall style. Authors are supported in comprehension of organisation of SLOs and their transition into coherent age-appropriate learning experiences. This helps in establishment of a shared understanding across the development team. Similar orientation and training are arranged for reviewers of textbooks.

The NCF recommends not only trainings for all textbook authors and reviewers but also certification through courses offered with the help of universities. The standards for inputs, processes and outputs need to be reviewed to align them with international practices.

11.5.5 Writing Process with Classroom Piloting

Textbook development proceeds through phased drafting process, with selected chapters piloted in classrooms during the writing process. Piloting is an important stage of textbook development which is often ignored. The piloting of selected chapters helps assess clarity of explanations, appropriateness of language, alignment with the intended level of learners, pacing of content, and the effectiveness of activities and questions. Feedback from teachers and students on selected chapters helps to identify gaps and areas that require simplification or strengthening. This feedback is then used to refine, improve, and finalize the material, ensuring that the textbook holds the interest of the child and is effective in real classroom contexts.

11.5.6 Review, Validation, and Quality Assurance

The review process includes both internal and external stages to ensure the quality, alignment, and usability of textbooks.

11.5.7 Internal Quality Assurance

Before submission for external review, the developing body, whether a textbook board or an approved publisher, establishes an internal quality assurance process. This includes a structured review of draft materials based on defined quality criteria, drawing on inputs from development teams, subject experts and designated quality assurance personnel. The internal review is an

² The current style guide is the “Style Guide for Textbook Development 2016; Curriculum Wing, MoFE&PT”

ongoing process during different stages of development. This internal process also incorporates feedback from classroom piloting and focuses on ensuring alignment with SLOs, conceptual accuracy, coherence, appropriate level of difficulty, clarity of language and overall consistency across chapters. This stage helps identify and address gaps, overlaps and any other issues with the content and design before the material is submitted for external review.

11.5.8 External Review and Validation

Following internal quality assurance, draft textbooks are reviewed by committees of experts designated by curriculum authorities through a structured process guided by clearly defined review criteria. Reviewers are oriented prior to the process to ensure a shared and consistent understanding of these criteria. The review looks at alignment with curriculum standards, benchmarks, and SLOs, as well as progression and coherence across grades and stages. It considers the accuracy, relevance and conceptual clarity of content, the appropriateness of language, and accessibility for the intended learners, and the extent to which the material supports learner-centred approaches. The review also takes into account the integration of cross-cutting themes, inclusion, representation, absence of bias, and the quality and range of assessment, including opportunities for higher-order thinking and the overall design and usability for diverse classroom contexts.

11.5.9 Revision, Editing and Design Integration

Based on feedback from the review, the content is revised and refined. Final editing of text and design is done to ensure that the textbook is error free and that all recommendations of the review committee have been incorporated.

11.5.10 Approval, Production and Distribution

The final manuscript is evaluated by the relevant curriculum authority against review recommendations before formal approval. Once approved, textbooks are produced and distributed in a timely manner to ensure availability at the start of the academic year, along with teacher guides and supplementary or digital resources where applicable.

11.5.11 Physical Durability

Textbooks are provided free of costs to children in government schools as well as many working under a public private partnership arrangement. The logistics involved for supply on the scale required are costly and intricate. Once these books reach the student there are no methods to replace a damaged textbook. This leads to learning losses which magnify if the

quality of paper and binding are below par. Standards for physical durability should be revised as per international benchmarks and quality assurance systems should ensure adherence to the same before allowing a book to be sent to school.

11.6 Monitoring, Feedback, and Continuous Improvement

Textbook and learning materials development is not a one-time process. It operates within a continuous quality improvement cycle. Structured feedback mechanisms gather evidence from teachers, schools, learners, and assessment data to evaluate the effectiveness, relevance, and usability of materials in real classroom contexts. Classroom observations, teacher feedback, learner responses, and analysis of assessment trends inform periodic review and revision, helping to identify gaps, improve alignment with curriculum expectations, and strengthen the overall quality of materials.

Textbooks and learning materials are a central means of translating curriculum vision into meaningful classroom practice. The NCF 2026 emphasises that their development and use should be guided by alignment with curriculum standards, learner-centred design, inclusion, feasibility, strong governance, and a commitment to continuous and evidence-based improvement.

In order to ensure quality textbooks, there is a need for designing a policy framework for textbooks while responding to the realities of devolution and current system needs. Such a policy should establish clear minimum standards for quality textbooks at the core level, while allowing flexibility for provincial contextualisation. The policy should clearly outline the roles of curriculum authorities, textbook boards, and private publishers and their coordination and communication mechanisms. It should incorporate strong quality assurance mechanisms across all stages of development, including transparent criteria for author selection, systematic piloting and feedback mechanisms and structured and multi-level review processes with clearly defined review criteria to ensure that textbooks are accurate, pedagogically sound, inclusive, and aligned with the curriculum.

12 Teacher Preparedness

Teachers play a pivotal role in the implementation of child-centred curriculum as guides and facilitators to learners in gaining and progressively building on competencies, across all five domains of learning, i.e., linguistic, cognitive, physical, socio-emotional, moral and spiritual. This focus on the holistic development of learners places a high responsibility on the teachers to enable ongoing learning in the classroom within their contextual realities including availability of capable leadership, access to resources, an enabling teaching environment, and satisfaction with their work through ongoing support from the overall education management and administration ambit.

12.1 Teacher Preparation and Classroom

As detailed in earlier chapters, learners' progression over the stages of schooling requires effective pedagogical approaches including experiential, inquiry-driven, discovery-oriented, questioning-based, projects and activities based, supplemented by co-curricular activities. Making pedagogy effective, rewarding, enjoyable, and engaging requires making it more participatory and stimulating through nurturing wonder, curiosity, exploration, along with encouraging peer group discussions, collaborative problem solving and creative work collectively and individually. Teachers are also expected to adopt the practice of assessment as a means to ensure learning transcends beyond knowledge acquisition to assimilation of skills, values, and attitudes enshrined in the learners' standards set in the NCF 2026.

At the same time, effective pedagogy intertwines a sharpened focus on formative and summative assessments to ensure that pedagogy is effective and efficient. Given the diversity in learners, it is also critical that pedagogical and assessment approaches include proficient differentiated instruction and evaluative techniques to cater to diverse learning acquisition capacity and pace as guided by relevant learning theories. The teachers, therefore, need to enable a productive and inclusive learning environment through deployment of proactive engagement methods, setting clear behavioural and attitudinal expectations rather than punitive action for discipline. Teachers must progress from testing mere memory and facts recall, to pursuit of facilitating and testing the achievement of core competencies on an ongoing basis as well as at the terminal stage of each grade to gauge readiness for the next one.

Transitioning to such student centric pedagogical approaches aimed at instilling knowledge, skills, and attitudes from predominantly rote learning methodologies, is essentially a shift in

mind sets that has to occur in head teachers, teachers, the community and the wider education delivery management and administration. A change in mind set cannot be achieved through only dissemination of curriculum and teaching and learning materials to teachers. It requires an effective communication strategy for all relevant stakeholders including teachers who are at the forefront of curriculum rollout in the classrooms. The NCF 2026 itself and the subsequent curriculum change process must therefore be communicated to the teacher education institutions, academic administrative structures, teacher training institutes (TTIs), head teachers and teacher students, and teachers currently in the workforce but undergoing trainings in the TTIs (Pre-service and In-service).

The National Professional Standards for Teachers (2008), provide a framework covering the essential dimensions of teacher development. One example is the Professional Development Framework for teachers prepared by the FDE, MoFE&PT, Government of Pakistan. The Framework (**Annex-VI**) is aligned with the National Professional Standards for Teachers. This framework addresses key aspects of teachers' professional growth and may serve as a guiding reference for teacher education institutions and education authorities in adapting and implementing professional development programs within their respective contexts.

12.2 Capacity Enhancement Support

The capacity enhancement systems (Pre- and In-service TTIs) for teachers are to embed improvements in pedagogical approaches and practice in their curriculum and programmes. The NCF 2026 and the subsequent curriculum aligned to it although developed through a consultative process spanning education sector stakeholders across the Federal Capital and provinces, will therefore be disseminated to the educational and teacher training institutions under Federal Government and the Provincial Education Departments and their respective teacher training institutes under a well thought out, administered and followed up communication strategy. The teacher training apparatus will then identify the training needs of teachers and augment the design of their training programmes to embed a focus on the required enhancement in knowledge, skills and attitudes needed for effectively rolling out the curriculum in classrooms.

Building on past and current experiences at the Federal and provincial levels, structured and context responsive CPD systems should be institutionalized across all jurisdictions, ensuring equitable access to professional learning opportunities. These systems should be designed to move beyond one-off training events towards sustained, practice-based professional growth.

Key features may include targeted training programmes aligned with curriculum requirements, supported by ongoing capacity strengthening mechanisms such as reflective practice, professional journaling, and collaborative peer learning.

The integration of Information and Communication Technology (ICT), including the use of relevant digital platforms and emerging tools such as Artificial Intelligence, should be leveraged to expand access, personalize learning pathways, and support continuous engagement. Such an approach would enable teachers to take ownership of their professional development while promoting a culture of inquiry, reflection, and innovation within the education system.

Capacity support will also encompass the development of teaching and learning materials including workbooks, teacher guides and lesson plans. These resources should be designed pilot-tested and refined prior to scaled up implementation. At the same time, teachers should be supported in learning to manage the classroom teaching and learning process and assisted with tools and techniques to balance workload, practice effective time management, mitigate and manage stress and pursue career growth. This requires strong leadership at the school level that is capable to follow up on supporting teachers to implement learning from trainings in the classroom for enhanced students learning outcomes.

12.2.1 Teacher Training Systems

The educational institutions including teachers training institutions should ensure the following:

Pre-services

Pre-service teacher education should be explicitly aligned with the official curriculum, ensuring that prospective teachers are prepared to understand, interpret, deliver, and assess curriculum in accordance with national standards. The programme should equip teachers with the competencies required to translate SLOs into effective classroom practices across subjects and stages.

Induction Training

The induction training should aim to support a smooth transition into professional practice by equipping teachers with essential pedagogical skills, curriculum understanding, and classroom

management competencies and should be continuously aligned with curriculum changes with required administrative and managerial skills to achieve the outcomes of the curriculum.

In-Service

In-service teacher development should be aligned with the official curriculum, enabling teachers to effectively implement and assess the curriculum as it evolves. It should strengthen their ability to translate SLOs into effective classroom practice, supported by ongoing mentoring and supervision, and the development and use of training materials across subjects and grades.

12.2.2 Mentoring and Supervision

Mentoring refers to a supportive, developmental process in which an experienced teacher, instructional expert, or head teacher works closely with a teacher to build professional capacity. It is non-evaluative in nature and focuses on guidance, coaching, and continuous professional growth. Supervision, in contrast, is a structured, system-level process aimed at ensuring quality, consistency, and accountability in curriculum implementation. The training of mentors including head teachers is instrumental for smooth implementation of curriculum.

The education systems will embed ongoing mentoring and supervision of teachers with the intent of meeting capacity deficits through an ongoing mentoring process. The range of needs will be identified as a first step, following which the said structures will provide targeted support on not only pedagogical elements to improve learning outcomes but also in terms of assistance to mitigate overloading of teachers, particularly in the context of multi-grade teaching and high student-teacher ratios.

The NCF envisions a phased response to these challenges. In the short term, the system should implement targeted strategies and programmes, supported by innovative use of human and material resources, to help teachers address immediate classroom demands. In the longer term, adequate and sustained resource provision should enable effective teaching. This includes strengthening mentoring systems, ensuring balanced school and class sizes, and creating an enabling school environment that supports individualized attention to learners and improves overall system responsiveness and productivity.

12.3 Teacher Licensing and Registration

The shift to a student-centric education delivery model necessitates the presence of a workforce of teachers that is committed and equipped with the motivation and capacity to adopt innovation in pedagogical approaches and methods in the face of consistently evolving emerging educational demands in an increasingly digital and skills-driven landscape. The presence of quality teachers in schools is therefore a top priority for the successful implementation of curriculum reform and requires structural support.

Beyond content knowledge, quality teaching requires appropriate disposition, deep understanding of the transformative role, commitment and passion and strong desire for self-improvement and development through-out the professional career to stay relevant and make advancements in the profession.

Persistently low SLOs in Pakistan are partly a result of under-capacitated teachers. There is an absence of a unified national teacher licensing mechanism to ensure consistent qualification requirements for teachers' entry and progression across their professional career. This leaves the teachers' workforce weakly regulated and unaccountable, with no systemic anchors to ensure compliance and performance tied to professional growth. There should be a teacher licensing mechanism established as a mandatory, standards-based system for entry and progression in the teaching profession.

Teacher licensing should be linked with accreditation standards established by the National Accreditation Council for Teacher Education (NACTE) to ensure quality and consistency in teacher preparation. Only graduates from accredited pre-service programmes should be eligible for initial licensing, subject to demonstration of required competencies aligned with the official curriculum of Pakistan. The licensing process should ensure that teachers are prepared as per the officially notified standards and competencies.

12.4 Responses in the Curriculum

The above issues have been highlighted, over the years, for reforms in various policies and plans at the federal and provincial levels. Given the scale of the requirements of teacher capacity development these changes, even if pursued with persistence and effectiveness, will take many years to become a regular part of the ground situation. To support better pedagogies, the curriculum will have to include specific guidelines for teachers. More importantly the

curriculum will be supplemented with a guide for trainers to orient teachers on the new curriculum and its implementation.

NCCW will develop video-based recordings to guide teachers in curriculum orientation and its various requirements. These videos will be available on the website of the MoFE&PT for asynchronous use. The level of details in these videos will be determined after finalisation of the curriculum and feedback from a sample of teachers.

Subject specific guidelines for teachers will be re-produced in textbooks.

DRAFT

13 Assessment and Examinations

Assessments are essential, and high value, exercises for successful implementation of the curriculum. They are central to the teaching and learning process of the individual learner and at the systemic level they inform policy makers on the effectiveness of implementation of the curriculum which include issues within the curriculum itself. Tools for various assessments vary but the principles remain the same – an assessment should test for the learning outcomes determined by the curriculum.

In a well-functioning education system, assessment contributes to improvement of quality and relevance of the curriculum, teaching practices, and educational equity. Some robust assessment systems ensure that all learners have meaningful opportunities to achieve the competencies and outcomes envisioned in the curriculum by providing an ongoing feedback that helps the learner, the teacher, and the entire education system to continuously learn and adapt.

This chapter outlines the types of assessments and their integration into the learning process, accepted standards and principles of assessments required to support effective implementation of the curriculum and the challenges of assessments and examinations in Pakistan that will need to be addressed through guidelines in the curriculum itself but, more importantly, systemic capacity building at the service delivery level: teachers, head teachers, local education authorities, and examination bodies.

13.1 Significance of Assessment

Assessments serve as a bridge between curriculum objectives, teaching practices, and student learning. Teachers' ability to assess progress of students and the gaps in their own teaching approaches form the strongest basis for an effective assessment system. Assessments help the teacher gauge the effectiveness of implementation of the curriculum as systematic evidence about the extent to which students are achieving the intended learning outcomes and competencies. It is an integral component of the teaching process and the third stage in an instructional cycle, undertaken after planning and delivering instruction.

From a policy perspective, assessment helps determine whether the content, pedagogy, and learning expectations defined in the curriculum are realistic, relevant, and achievable for students. It provides feedback not only on student performance but also on the effectiveness of teaching methods, learning materials, and classroom practices.

Assessment contributes to educational accountability and quality assurance through generation of reliable data on SLOs at the classroom, school, and system levels and, therefore, provide the information that functions as the inflection point in the curriculum cycle. When aligned with curriculum goals, assessment becomes a powerful tool for improving teaching, enhancing learning experiences, and ensuring equitable educational opportunities for all learners.

13.2 Assessment Integration for Effective Learning

A balanced assessment system integrates multiple approaches that support both continuous learning and formal certification of achievement. The three complementary purposes of assessment are illustrated below:

- i) Assessment for learning
- ii) Assessment as learning
- iii) Assessment of learning

13.2.1 Assessment for Learning

Assessment for learning refers to formative assessment conducted during the teaching-learning process. It helps teachers monitor student progress, identify learning gaps, and provide feedback for improvement. Examples include school-based assessments such as classroom questioning, quizzes, assignments, observations of student participation, portfolios, science lab performance, and computer lab activities.

13.2.2 Assessment as Learning

Assessment as learning emphasizes learner participation in the assessment process. Through self-assessment and peer feedback, students develop the ability to reflect on their learning and take responsibility for improvement. This approach strengthens metacognitive skills and promotes independent learning. For example, in classrooms, students may use checklists or simple rubrics to review their own written work (e.g., Urdu essays or English paragraphs) or exchange copies with peers to provide feedback on clarity, grammar, and content, helping them identify mistakes and improve their responses.

13.2.3 Assessment of Learning

Assessment of learning refers to summative evaluation conducted at the end of a unit, term, or academic program. It measures the extent to which learners have achieved the prescribed

learning outcomes and competencies. Examples include board examinations such as SSC and HSSC, annual school examinations, entrance exams like LAT, MDCAT, and ECAT, national large-scale assessments like NAT and FLS, and international assessments like TIMSS and LaNA conducted by PIE. These assessments are typically high-stakes and are used for grading, promotion, certification, as well as for national and international benchmarking and reporting purposes.

13.3 Types of Assessment

In alignment with the curriculum and intended SLOs, assessment can take several complementary forms that support both learning improvement and the evaluation of achievement. The major types of assessment include:

13.3.1 Formative Assessment

Formative assessment is conducted continuously during the teaching–learning process to monitor student progress and provide timely feedback. It helps teachers identify learning gaps, adjust instructional strategies, and support individual learners. Examples include classroom questioning, quizzes, assignments, observations, peer feedback, and short reflective tasks. More specifically, formative assessments are:

- i) Helpful to students identify their strengths and weaknesses and target areas that need to be addressed.
- ii) Help for teachers to recognize where students are struggling and to address these problems
- iii) Essential for those skills that are usually not assessed in large-scale exams, like languages (listening & speaking) and practicum-based assessments that are conducted in labs/workshops.
- iv) Helpful to measure affective domain aspects like attitudes, motivation, beliefs, values, liking/disliking etc. as this domain is usually neglected in every assessment, especially in high-stakes and large-scale exams/assessments.

13.3.2 Summative Assessment

Summative assessment evaluates students' overall achievement at the end of a unit, term, or academic year. It measures the extent to which learners have achieved the curriculum's learning outcomes and competencies. Common forms include final examinations, end-of-term tests, and

major projects. The goal of summative assessment is to evaluate student learning by comparing it against some standards or benchmarks. This assessment is often carried out at the end of a 'learning and teaching' cycle. More specifically, summative assessments:

- i) Include annual and term-end examinations conducted by the schools
- ii) Include SSC and HSSC board examinations conducted by various boards
- iii) Are also conducted practical examinations in science subjects.
- iv) Are also conducted for scholarship examinations for the selection of high-performing students.
- v) Include entry tests for professional education, such as LAT, MDCAT and ECAT etc.

In terms of the management of education assessment, the types include:

13.3.3 Large-scale assessment

Large-scale assessment refers to standardized assessments conducted at the national, provincial, or international level to measure and compare SLOs across a large population of students. These assessments are designed to evaluate how effectively education systems are enabling students to achieve the competencies and learning outcomes defined in the curriculum.

PIE, in collaboration with Provincial and Education Assessment bodies, conducts large-scale assessments to evaluate the overall capability and quality of the education system and to focus on providing evidence-based findings to policymakers for decisions. Sample-based large-scale assessments NAT have been conducted in 2005, 2006, 2007, 2008, 2014, 2023, and 2026. The purpose of these assessment studies has been to:

- i) Provide international benchmarks that assist policymakers in identifying the comparative strengths and weaknesses of their educational systems.
- ii) Provide high-quality data that will increase policymakers' understanding of key factors that affect teaching and learning and for preparing and evaluating educational reforms.
- iii) Allow participating nations to compare students' educational achievement across borders.
- iv) Address concerns about school resources and the quality of curriculum and instruction by collecting background information of students and their parents, subject teachers, and head teachers.

13.3.4 Formal and Informal Assessments

Formal assessment refers to structured and planned methods used to evaluate students' learning according to predetermined criteria and standards, such as tests, examinations, and graded assignments. These assessments are usually conducted at specific points in time and their results are formally recorded and reported. In contrast, non-formal (informal) assessment occurs during regular classroom activities and is more flexible and continuous. It includes methods such as classroom questioning, observation, discussions, and short learning tasks that help teachers monitor student understanding. While formal assessment focuses on measuring achievement, non-formal assessment primarily supports ongoing learning and instructional improvement.

13.3.5 External and Internal Assessment

Internal and external assessments are two complementary approaches used to evaluate student learning and achievement. Internal assessment is conducted by teachers within the school as part of the regular teaching-learning process. It includes activities such as quizzes, assignments, projects, class participation, and continuous formative assessments that help monitor students' progress and provide feedback for improvement. The external assessment, on the other hand, is conducted by an outside authority, such as examination boards or assessment agencies, using standardized procedures to ensure objectivity and comparability of results across schools or regions. While internal assessment supports continuous learning and instructional improvement, external assessment provides system-level validation and certification of students' academic achievement.

13.3.6 Continuous Assessment

Continuous assessment is an ongoing process of evaluating students' learning throughout the teaching and learning period rather than relying solely on end-of-term examinations. It involves a variety of assessment methods such as classroom observations, quizzes, assignments, projects, presentations, and participation in learning activities. Continuous assessment helps teachers monitor students' progress regularly, identify learning gaps, and provide timely feedback to support improvement. Findings of such assessments are recorded and combined in some way to gain the overall grades/marks at the end of the course.

13.3.7 Criterion and Norm-Referenced Assessments

In criterion-referenced assessment, students' achievements are evaluated against clearly defined learning standards or criteria set in the curriculum. The focus is on determining whether a learner has mastered specific knowledge, skills, or competencies. In contrast, norm-referenced assessment compares a student's performance with that of other students, typically within a group or population, to determine relative ranking or position. While criterion-referenced assessment emphasizes mastery of learning outcomes, norm-referenced assessment highlights comparative performance among learners. Examples of norm-referenced assessment are national examinations, semester examinations, and end-of-year examinations, while class tests, assignments, and exercises are examples of criterion-referenced assessment.

13.4 Assessment Standards

Assessments are coherently aligned with curriculum standards and student learning outcomes (SLO), and designed to advance equity, inclusion, and continuous improvement. They adhere to the recognized principles of fairness, validity, reliability, and transparency. Principles of Quality Assessment Standards are elaborated as follows:

- i) **Validity:** Assessments must measure what they intend to measure. Reviews, moderation, item alignment with SLOs and Table of Specification, ensuring proportionate representation of various content/domain areas of curriculum and cognitive levels as per requirements (determined weightage) may help.
- ii) **Reliability:** Assessment results must be consistent and replicable. Reliability may be established if the results of successive years and different examination bodies are comparable and standardized. Piloting and statistical analysis may help.
- iii) **Fairness:** Assessments must be free of biases. Along with human intervention, on-screen marking and AI assistance may help in fairness. The conduct of tests must be transparent.
- iv) **Transparency:** Criteria, rubrics, and expectations must be clearly communicated.
- v) **Authenticity:** Tasks must reflect real-world contexts and meaningful learning experiences.
- vi) **Alignment:** Tasks and tools must align with curriculum competencies and SLOs.

To ensure that the curriculum effectively develops students in line with its goals and objectives, the assessment system will incorporate a balanced and coherent mix of approaches, including

diagnostic assessment to identify prior knowledge and learning needs; formative assessment to guide ongoing instruction and improvement; summative assessment to evaluate achievement of standards; performance-based and authentic assessment to measure application of knowledge and skills; self- and peer-assessment to foster reflection and learner agency.

The details and methods vary according to the level of learning, the content, and SLO being assessed. A whole range of assessment options can be employed by teachers and external examiners that ensure that not only the breadth but also the depth of understanding of the content is assessed.

13.5 Types of Assessment Standards

Assessment standards are applied at multiple levels. These include content standards, performance standards, and process standards. These direct the content, quality and efficiency of assessments.

13.5.1 Content Standards

These define what is to be assessed, including, knowledge, skills, values, and competencies derived from the curriculum. Content standards are directly aligned with the prescribed curriculum and outline the expected learning in each subject and grade level. They ensure that assessment reflects the intended learning outcomes rather than unrelated or rote content. Content standards are derived from the extant curriculum. For example, in Grade 10 Islamiyat, a content standard may require students to understand the concepts of Tawheed, Risalat, and Akhirat, along with their application in daily life. Similarly, in Mathematics, a content standard may specify students' ability to solve algebraic equations or interpret data using graphs. In primary grades, especially under foundational learning reforms, content standards emphasize basic literacy and numeracy skills such as reading comprehension in Urdu and basic operations in arithmetic.

13.5.2 Performance Standards

These specify the level of performance students must demonstrate. They describe quality indicators such as accuracy, clarity, depth of understanding, critical thinking, and the ability to apply knowledge in new situations. Performance standards help distinguish between different levels of student achievement and ensure that assessment goes beyond mere recall.

Examination boards such as the Federal Board of Intermediate and Secondary Education (FBISE) and provincial Boards increasingly incorporate performance standards through structured marking schemes and rubrics. For instance, in a Grade 9 General Science exam, a high-level response may require not only correct definitions but also an explanation of concepts with diagrams and real-life applications. Similarly, in English language papers, performance standards are reflected in criteria such as coherence, grammar, vocabulary usage, and organization of ideas in essay writing. Classroom assessments in schools are adopting rubrics to evaluate presentations, projects, and written work based on defined quality indicators.

13.5.3 Process Standards

These outline how assessments should be designed, administered, scored, and reported. They guide teachers and institutions in ensuring that assessments are fair, reliable, valid, and consistent across different contexts. Process standards emphasize the use of appropriate tools, clear instructions, standardized marking, and timely feedback to students.

Process standards are reflected in guidelines presented in the National Curriculum and various assessment and examination bodies. For example, standardized procedures are followed for paper setting, moderation, invigilation, and marking in board examinations to ensure fairness and transparency. In classroom settings, teachers are encouraged to use test blueprints, item specifications, and marking keys to maintain consistency. The introduction of SBA in several provinces also highlights process standards by providing structured formats, assessment calendars, and reporting mechanisms to schools.

13.6 Proficiency Levels

These relate to benchmarks such as basic, proficient, and advanced achievement levels, enabling consistent interpretation of students' performance. Proficiency levels help categorize SLOs into meaningful bands, making it easier to communicate progress to students, parents, and policymakers. They also support targeted interventions for learners at different levels.

The proficiency levels are increasingly being used in large-scale assessments and reforms. For example, national and provincial assessments (such as those conducted under large-scale learning assessments) often classify students as below basic, basic, proficient, and advanced. In classroom practice, some schools align student report cards with grading scales (e.g., A, B, C) linked to defined proficiency descriptors. Under foundational learning initiatives, students may be assessed on whether they can read at grade level, below grade level, or above grade

level, which directly reflects proficiency benchmarks. These levels help in identifying learning gaps and planning remedial support programs, especially low-performing students.

13.7 Key Components of Effective Assessment Standards

Effective assessment standards need to have clear learning outcomes, assessment criteria and rubrics, methods and tools, reporting and grading standards and quality control mechanisms.

13.7.1 Clear Learning Outcomes

Assessment standards must be directly linked to SLOs that specify what students should know and be able to do.

13.7.2 Assessment Criteria and Rubrics

Criteria define what is expected in students' responses. Rubrics articulate performance levels with descriptors to guide scoring.

13.7.3 Assessment Methods and Tools

Standards must outline appropriate methods such as MCQs, short responses, essays, projects, portfolios, performance tasks, and practical exams.

13.7.4 Reporting and Grading Standards

These ensure that students' progress is communicated accurately through grades, descriptive feedback or competency-based reporting.

13.7.5 Quality Control Mechanisms

Moderation, standard-setting, benchmarking, and item-review processes ensure system-wide reliability and fairness.

13.8 Existing Challenges of Exams and Assessments

Despite various reforms and policy efforts, assessments and examinations form another weak link in the value chain for implementation of the curriculum. The lack of capacity impacts learning and forces even the more 'successful' learner into rote memorisation. Critical-analytical ability, neither tested by assessments nor developed through pedagogical practices, remains under-developed. The problem of capacity in schools is also reflected in high-stakes examinations conducted by the various boards of examinations in the country. At a systemic level, data generated by diagnostic assessments conducted by specialised examination bodies

at the provincial level and the Pakistan Institution of Education (PIE) at the national level remains insufficiently used for policy reforms including reform of assessments and examinations.

13.8.1 School Level Capacity

At the school level the weak capacity of teachers to conduct assessments (formative and summative) at the right age level, through the appropriate tools and as per the requirements of the curriculum is almost endemic. Across multiple provincial education sector analyses and other work, teachers' lack of ability to develop assessment items and tools has been raised as a serious weakness. This primarily requires a response from pre-service teacher education but also internal support from the departments of education once a teacher is recruited.

The role of head teachers as mentors who not only ensure regularity and quality of assessments but also support teacher capacity has been weakened. Across the country, at the primary level a majority of schools lack head teachers. This is a challenge for all learning processes, including, assessments and school examinations. Head teachers are more engaged in administrative matters and only a small percentage provide academic support.

The expectations of most supervisors at the local level (district, tehsil etc.) are of syllabus coverage. These officers also do not provide any academic support to enhance the capacity of teachers and schools in conduct of assessments and consequently the quality of learning or curriculum implementation. Syllabus coverage without information of the learning outcome at the student level through quality assessments does not constitute effective implementation of the curriculum.

13.8.2 High-Stakes Examinations

Serious capacity limitations also exist in the boards of examinations in terms of quality of examinations as well as their credibility. These limitations affect the credibility, fairness, and effectiveness of examinations and limit their ability to accurately measure student learning and competencies. Issues such as lack of standardization, overemphasis on rote memorization, weak alignment with the curriculum, limited use of assessment data, and insufficient capacity of assessment personnel continue to hinder the development of a robust and reliable assessment system.

Clear assessment frameworks are missing and many personnel involved in assessment (paper setters, examiners, invigilators, etc.) lack formal training in modern assessment practices, affecting quality and consistency. Training for these professionals is undertaken only in limited cases and never as part of fixed, rule-based, requirement. These examinations are often heavily dependent on textbooks and past papers, which again encourage rote learning rather than conceptual understanding and higher-order thinking skills.

Beyond the personnel, important processes like testing for reliability and validity are absent. These limitations result into the following:

- i) There is often a misalignment between what the curriculum/SLOs requirement is and what is being assessed. Usually, examinations frequently focus on textbook content rather than intended learning outcomes that focus on higher-order thinking skills.
- ii) Most assessments emphasize rote memorization and recall, raising concerns about their ability to accurately measure students' actual understanding and competencies, which are required by the national curriculum.

The above leads to poor testing of the learning needs as per the requirements of the curriculum. It also impacts the teaching and learning processes (already weak in pre-secondary stages) to rely on memorization over understanding and higher order thinking. There is a backwards push into classroom practices.

The worst exacerbation comes from the prevalence of cheating, paper leaks, impersonation, and use of unfair means that undermine the credibility of examinations in many parts of the country. Weak monitoring, lack of transparency, and inconsistencies in processes such as paper setting, marking, and result compilation across the boards further reduce trust in the examination system.

Another problem that further aggravates the outcomes for students and the education system as a whole is that assessment systems across federal and provincial boards (including the various boards within the provinces) lack comparability. This in disparities in standards, grading practices, and comparability of student performance. These differences continue despite the work of the Inter-Board Coordination Commission (IBCC). The Commission has recently prepared a standardised assessment framework (Model Assessment Framework 2024) to eliminate differences in quality of examinations across the boards in the country. The Framework has laid out a period of five years for achievement of these objectives. Even if

practically, it takes a longer time due to the large scale of the scope of the reform, standardised frameworks will help reduce the disparities in quality of examinations conducted by the various boards. It will also help improve the teaching and learning processes in schools affiliated with them.

13.8.3 Systemic Level Use of Data

Despite the above issues being repeated over different policies, the assessment practices and examination systems have not adequately responded to curriculum revisions, modern pedagogical approaches and learning outcomes. A key reason for the continued status quo has been the lack of use of assessment data. These include the diagnostic data discussed above and that of the boards. Irrespective of the differentials in quality, and overall weak capacity, issues this data can be used to not only improve examinations but can also provide valuable information to policy makers and curriculum developers.

13.9 Responses in the Curriculum

The challenges mentioned above do not exhaust the issues in assessments and examinations but provide the overall picture quite clearly. The curriculum cannot address these issues, which require systemic response beyond the organisations responsible for its development and revision. However, the lessons learnt from previous experiences show that the curriculum document will have to add more detailed guidelines on assessments. These will be for each level and subject and will adhere to the broader standards given above. The guidelines will clarify purpose and method of assessment to be used at various stages with examples. NCCW will develop video-based guidelines along with the paper-based guidelines. These videos will be available on the website of the MoFE&PT for asynchronous use.

The curriculum will also provide guidelines for assessment personnel of high stakes examinations. The guidelines will require testing of reliability and validity and underline the importance of, and approach to, development of papers that test beyond rote memorisation.

Close collaboration between curriculum authorities and organisations responsible for diagnostic assessments will be ensured for ongoing review of the effectiveness of implementation of the curriculum, including the issues in the curriculum itself.

14 School Readiness

Schools ready to meet the demands of learning, prescribed by the curriculum are essential to successful implementation. Therefore, the most important area of effective rollout is to prescribe the minimum standards for schools (human resource, infrastructure, technology and child well-being) to enable them to meet the requirements of the curriculum. Three key components are human resource, infrastructure, and facilities as per the requirements of the curriculum and an overall learner (or child) friendly environment. The requirements of HR qualification, numbers, infrastructure, and facilities like libraries and laboratories are closely related to the demands of the curriculum. It will therefore be useful for every curriculum to identify the HR requirements and infrastructure, facilities and other resources required for implementation in various grades. This will not only assist in planning of school development but also help rationalise the expectations of the curriculum to ground realities. These expectations can begin to grow more rapidly as school readiness improves.

14.1 Human Resource Availability

Trained teachers with relevant competencies should be available in adequate numbers. Single teacher and two teacher schools at the primary level will not be able to implement even the most rudimentary curriculum. In the 21st century when expectations from education have grown, schools require at least one teacher per grade at the primary level. This includes a dedicated and trained teacher for early childhood education.

At the post-primary level subject specialists, especially, in science, mathematics and learning of technology-related are essential. Non-availability of these specialist teachers will impinge on the learning outcomes of children and in the long run the education vision of the curriculum. Head teachers are the best monitors and mentors to guide effective implementation of curricula. All schools must have head teachers irrespective of the level. These head teachers are essential for effective stewardship of effective implementation of the curriculum in the classrooms through supervision and mentoring.

14.2 Infrastructure

School infrastructure can be divided into two components. The first comprises school buildings, classrooms, furniture and water, sanitation and hygiene (WASH) facilities. The second supports teaching and learning more directly and includes classroom teaching aids,

libraries and laboratories. Both components are equally important for the effective implementation of the curriculum.

Climate change also has significant implications for school infrastructure standards. School buildings must not only be capable of withstanding extreme weather events but also be designed or upgraded to provide safe and conducive learning environments in the face of steadily rising average temperatures.

14.2.1 Classroom and Other Facilities

The first requirement of adequate school infrastructure is the availability of a sufficient number of classrooms. Single-room and two-room schools with multigrade teaching cannot support the effective implementation of the curriculum. School construction standards should therefore be revised with the objective of progressively reducing multigrade teaching.

Standards for other essential facilities, such as water, sanitation and hygiene (WASH), should also be reviewed from a child-centred perspective. An important component is availability of menstrual health management facilities for adolescent and adult girls as part of child welfare. At the same time, school infrastructure should provide a safe and comfortable working environment for teachers.

The concept of learner-friendly school construction is being redefined in the context of climate change. Average temperatures are expected to continue rising, while extreme weather events are becoming more frequent. School infrastructure must therefore not only be capable of withstanding extreme weather events but also respond to other effects of climate change, including excessive heat. Improving infrastructure resilience is essential because learning days lost as a result of unsafe or unsuitable school conditions cannot easily be recovered.

14.2.2 Laboratories

The effective teaching of science subjects requires adequately equipped and functional laboratories, together with the materials specified in the curriculum. Arts education similarly requires appropriate spaces, equipment and consumable materials. Technical education streams have additional requirements for specialised workshops, equipment and materials, depending on the subjects offered. Provision must also be made for the regular maintenance of equipment and the timely replenishment of consumable materials to ensure that these facilities remain functional.

14.2.3 Libraries and Other Learning Material

Access to supplementary reading materials, whether through a fully functional school library or, at a minimum, a classroom library housed in a cupboard, is essential for learning. However, the mere presence of a library is not sufficient; it must be accessible, adequately resourced and regularly used. The available reading and learning materials should support the objectives of the curriculum as well as the co-curricular and extracurricular activities envisaged in the Scheme of Studies.

14.2.4 Technology Readiness

As the integration of technology into teaching and learning becomes increasingly common worldwide, schools require appropriate technological infrastructure, teachers who can use technology effectively for instructional purposes, and specialists in digital learning, including artificial intelligence (AI). Strengthening the technological and AI readiness of schools will help accelerate the preparation of children for life and work in an increasingly digital society. A curriculum incorporating digital learning and AI cannot be implemented effectively unless schools have the necessary infrastructure, equipment, connectivity, expertise and technical support.

A Teacher Competency Framework (TCF) for technology must accompany the curricula where either technology (including AI) is taught as a subject or it is used in teaching and learning of other subjects. The TCF for technology will have to be prepared as part of the implementation plan of the curriculum.

14.3 Flexibility in School Calendars

A number of learning days are lost due to unforeseen as well as predictable causes. The former includes weather-related events, law and order situation, and other unforeseen reasons. The latter include harvest period differentials in various parts of the country. In these situations, children have to leave school to support families. Changing weather pattern also sometimes require early closures. Local education authorities should be mandated to complete the teaching-learning time as required in the Scheme of Studies and the curriculum. They should be given due autonomy and flexibility to achieve this objective.

14.4 Responses in the Curriculum

The curriculum guidelines will identify number of teachers and other facilities required for effective implementation at the school level. These guidelines will be at a minimum level and not unrealistic. Unfortunately, the extremely weak resource situation of a large number of schools may lack even these minimum requirements. Therefore, the implementers will have to identify resource gaps and prepare and implement a costed plan. This will be a requirement for both public and private schools. The regulators will engage with the latter for compliance with the resource requirements.

Infrastructure and other requires of disability readiness should also be accounted for in the resource analysis to allow for inclusive education practices to take root and scale up.

14.5 Implementation in Special Schools

Implementation of curricula in special schools requires maximum adaptability. Authorities responsible for special education, school leadership, and teachers will be fully empowered to adapt the curriculum as per the needs of learners in these schools. They will provide feedback to NCCW for any adjustments to the curriculum required from their perspective and any additional need identified. The challenge of qualified human resource within special education systems and the market is high for children with disabilities who require support in these institutions to continue their education. This is an implementation challenge that requires response from officials with the mandate for delivery of special education for children with disabilities.

14.6 Implementation in Madrassas

Directorate General of Religious Education (DGRE) of MoFEPT has the responsibility for mainstreaming of madrasa education. NCCW will engage closely with DGRE during preparation of curricula and also during implementation. The final arbiter of implementation of the Core-Plus principle in the case of madrassas will be DGRE.

15 Research

Research for continuous improvement is an integral part of efficient and effective curriculum implementation, consistent with the NCF's emphasis on evidence-based decision-making and continuous improvement. It is part of the feedback mechanism for the curriculum cycle. Academic research on areas, either identified by the government or independent researchers, needs to be encouraged and supported. This will require strengthening the research function of the NCCW and organizations responsible for curriculum development and implementation in the provinces. Robust and relevant research requires formal partnerships with academia, support and training for teachers to undertake research that contributes to system-wide learning and revival of the research functions of NCCW and the provincial organisations responsible for curriculum development. Funding for research will be required to ensure that learning through research is a permanent feature of the curriculum implementation and review cycle.

15.1 Institutional Framework for Research

A well-defined institutional framework is essential for strengthening research within the school education system. Annex VII explains the mandates and institutional roles and responsibilities for research, development and innovation within the education system.

The main deficit is of capacity. This is essential for strengthening research within the school education system. Teachers require skills for classroom-based inquiry, reflective practice and use of assessment evidence to improve instruction. Curriculum developers need research competencies to interpret learning data, evaluate curriculum effectiveness and improve coherence and relevance. Education managers and school leaders require the ability to analyse performance evidence, monitor implementation and support school improvement planning. Formal engagement of academia into the research agenda and processes is necessary for high quality, informed, learning. The NCF shall emphasize structured professional development through workshops, short courses, mentoring and in-service training focused on classroom research, use of assessment data and practical innovation. Institutional support mechanisms, including access to research resources, collaboration time, recognition of effective practices and opportunities for professional growth, will help to sustain a culture of inquiry and improvement in schools.

15.2 Integrating and Strengthening Research

Research will be systematically integrated with assessment and quality assurance to strengthen learning outcomes, improve teaching practices, and enhance accountability across the school education system. Assessment data generated at the classroom, school, provincial, and national levels will be analysed regularly and used as mandatory input for research and decision-making. This process will identify learning gaps, track trends in student achievement, and determine factors influencing performance, thereby ensuring that curriculum reforms and instructional strategies remain grounded in classroom realities.

Continuous improvements in quality and effective curriculum implementation will be supported by research that will guide course correction and innovation. Schools and education departments will undertake systematic inquiry to test, refine, and scale effective practices, ensuring that improvements are sustained and contextually appropriate.

The respective education authorities will promote international engagement to strengthen the research ecosystem. Comparative studies, global assessments, and international benchmarks will inform curriculum and instructional improvements, while ensuring adaptation to local contexts. Participation in international research and assessment networks will be encouraged to enhance collaboration, build capacity, and facilitate the exchange of knowledge and expertise. Further, Regional and South-South collaboration will also be leveraged to share contextually relevant solutions, teaching strategies, and innovations among countries facing similar challenges. Such partnerships will support collective learning and contribute to more effective and sustainable curriculum implementation in the country.

15.3 Way Forward: Institutionalising Research

Strengthening research is essential for achieving sustainable curriculum reform in Pakistan. Embedding research into school curriculum policy, practice and institutions will ensure that curricula remain relevant, inclusive, and responsive to both national priorities and global educational trends. Strategic recommendations include:

- i) Development of a policy for integration of research in curriculum development, implementation and review.
- ii) Formal arrangements with academia to cooperate, among others, in the following:

- a. Capacity building: Strengthen the skills of teachers, curriculum developers and education managers to engage in research and reflective practice.
 - b. Conduct PhD level comparative studies on curriculum development and implementation issues and challenges faced and solutions thereof. Universities will assign specific topics to research students at MS and Ph.D level in collaboration with the relevant government organisations at the Federal and provincial levels.
- iii) Encouragement of coordinated efforts among Federal and provincial education authorities, school administrators and education experts to ensure cohesive curriculum development.
 - iv) Activation of the research functions embedded in the mandates of various education organisations responsible for curriculum and textbooks development and examinations.
 - v) Building capacity within key organisations like NCCW, PIE and provincial counterparts to collect and present research evidence into easily comprehensible policy recommendations to be used in curriculum design, review and revision processes.
 - vi) Identification of topics and themes by NCCW and provincial partners for research related to curriculum development and assessment. In addition, academia will be encouraged to autonomously select areas of research that they deem important and relevant to more effective review and implementation of the curriculum.
 - vii) Funding of research, which will be included in the costed implementation plan for roll out of the curriculum with clear demarcation of responsibilities across Federal and provincial institutions.

Annexure I: Stage-Wise Progress of Learner Standards

Standard 1: Develop foundational language and literacy skills, beginning in familiar language and progressing to additional languages, including listening, speaking, reading and writing to support comprehension and expression across contexts.

Lower Primary	Upper Primary	Middle Stage	Secondary / Higher Secondary
Develop listening and speaking skills in familiar language, recognising sounds, words and simple sentences through interaction, storytelling and guided reading and writing activities.	Strengthen reading and writing skills in familiar language while beginning to use additional languages for simple communication and comprehension.	Apply reading and writing skills across subjects, using familiar and additional languages to interpret texts, organise ideas and communicate for different purposes.	Demonstrate advanced literacy and communication skills across languages, including critical reading, analytical writing and effective expression in a range of contexts and disciplines.

Standard 2: Use language effectively to communicate, interpret and construct meaning across contexts, while appreciating linguistic diversity and cultural expression.

Lower Primary	Upper Primary	Middle Stage	Secondary / Higher Secondary
Use familiar language to express needs, ideas and experiences through listening and speaking, and begin to recognise simple written texts.	Communicate ideas in familiar and additional languages through reading and writing simple texts, and begin to interpret meaning.	Use language across subjects to interpret texts, organise ideas and communicate for different purposes in familiar and additional languages.	Use language effectively across contexts and disciplines to communicate, interpret and construct meaning through critical reading, analytical writing and purposeful expression.

Standard 3: Apply literacy skills to access, analyse and create information across disciplines, supporting learning, inquiry and knowledge construction.

Lower Primary	Upper Primary	Middle Stage	Secondary / Higher Secondary
Begin to use basic literacy skills to access simple information through listening, speaking and early reading, and share ideas through drawing, speaking and guided writing.	Use reading and writing to access information from simple texts across subjects, identify key ideas and begin to create short written responses.	Apply literacy skills to access and analyse information from a range of texts across subjects, organise ideas and create structured written and oral responses for different purposes.	Use advanced literacy skills to critically analyse and synthesise information from diverse sources across disciplines, and create well-structured and purposeful texts to support inquiry and knowledge construction.

Standard 4: Demonstrate conceptual understanding across disciplines, building clarity of key ideas and the ability to make connections across areas of learning.

Lower Primary	Upper Primary	Middle Stage	Secondary / Higher Secondary
Begin to understand simple concepts through observation, experience and interaction, and make basic connections between ideas in familiar contexts.	Develop understanding of key concepts across subjects and begin to relate ideas within and across learning areas.	Apply conceptual understanding to explain relationships between ideas across subjects and make connections in different contexts.	Demonstrate deep conceptual understanding across disciplines and make meaningful connections between ideas to analyse and interpret complex situations.

Standard 5: Apply higher-order thinking skills and 21st century skills including critical and creative thinking, problem-solving, collaboration and perseverance.

Lower Primary	Upper Primary	Middle Stage	Secondary / Higher Secondary

Begin to ask questions, explore ideas, solve simple problems with guidance and work with others in familiar situations.	Develop the ability to think critically and creatively, solve problems using learned strategies and work collaboratively with others, building foundational 21st century skills.	Apply critical and creative thinking to analyse situations, solve problems independently and collaboratively and show initiative and flexibility in varied learning contexts, reflecting key 21st century skills.	Demonstrate advanced critical and creative thinking, solve complex problems in diverse contexts, collaborate effectively and independently and show adaptability and informed decision-making as part of 21st century skills.
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Standard 6: Use scientific and mathematical reasoning, including inquiry, evidence-based thinking, analysis of data and logical reasoning, including through interdisciplinary approaches such as STEAM, to understand and solve problems.

Lower Primary	Upper Primary	Middle Stage	Secondary / Higher Secondary
Begin to observe, and explore patterns and relationships in familiar contexts, using basic reasoning to understand simple problems.	Develop the ability to use scientific and mathematical reasoning to investigate simple problems, collect and interpret basic data, integrate knowledge and draw simple conclusions.	Apply inquiry and reasoning to analyse problems, interpret data and use evidence to explain ideas across subjects, including through integrated approaches like STEAM.	Demonstrate advanced scientific and mathematical reasoning to investigate and solve complex problems, analyse data critically and apply evidence-based thinking across disciplines, including through interdisciplinary approaches such as STEAM.

Standard 7: Demonstrate learning-to-learn skills, including goal setting, reflection, monitoring progress and adapting strategies to become independent and lifelong learners.

Lower Primary	Upper Primary	Middle Stage	Secondary / Higher Secondary
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Begin to follow simple routines, set basic goals with guidance and reflect on learning experiences with support, developing awareness of how they learn.	Develop the ability to set simple learning goals, reflect on their work and begin to monitor their progress with some independence, using simple strategies to improve learning.	Apply learning-to-learn strategies by setting goals, monitoring progress and reflecting on strengths and areas for improvement, begin to adapt their approach to learning.	Demonstrate independent learning by setting meaningful goals, monitoring progress, reflecting critically and adapting strategies to improve learning to become lifelong learners.
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Standard 8: Apply financial, economic and entrepreneurial understanding, including responsible resource management, informed decision-making and initiative in real-world contexts.

Lower Primary	Upper Primary	Middle Stage	Secondary / Higher Secondary
Understand simple ideas about money, needs and wants, and use resources carefully in familiar contexts.	Develop understanding of basic financial concepts such as saving, spending and simple decision-making, and begin to use resources responsibly.	Apply financial and economic understanding to make informed decisions, manage resources and demonstrate initiative in everyday situations.	Demonstrate advanced financial, economic and entrepreneurial understanding by analysing choices, managing resources effectively and taking initiative in real-world contexts.

Standard 9: Develop motor skills, including fine and gross motor coordination, balance and control to support movement and participation.

Lower Primary	Upper Primary	Middle Stage	Secondary / Higher Secondary
Develop basic fine and gross motor skills through play and guided activities, including holding and	Strengthen fine motor skills for writing, drawing and tasks requiring greater control and	Apply motor skills with increased control and coordination in varied contexts, demonstrating	Demonstrate advanced control, coordination and precision in fine and gross motor tasks,

controlling a pencil, drawing, early writing and simple tasks, along with coordination, balance and control in familiar movements.	precision, and improve coordination, balance and control in a range of structured physical activities.	precision in writing, drawing and creating, along with balance and controlled movement in physical tasks..	including writing, design and creative activities, and apply these skills effectively in varied contexts..
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Standard 10: Maintain physical health and well-being through healthy habits, including hygiene, nutrition and physical activity.

Lower Primary	Upper Primary	Middle Stage	Secondary / Higher Secondary
Practice basic hygiene routines such as handwashing and personal cleanliness, identify simple healthy and unhealthy foods and participate regularly in play and physical activities.	Follow daily hygiene routines, describe balanced meals using common food groups and participate regularly in physical activities and simple sports.	Use knowledge of hygiene and nutrition to make healthier choices, plan simple balanced meals and maintain regular participation in physical activity and competitive sports in individual and team settings.	Make informed decisions about hygiene, nutrition and physical activity, plan and manage healthy routines and sustain active participation in physical activity to support long-term well-being.

Standard 11: Develop self-awareness and emotional regulation to support well-being and responsible behaviour.

Lower Primary	Upper Primary	Middle Stage	Secondary / Higher Secondary
Begin to recognise and name their emotions, express feelings in simple ways, learning to	Develop awareness of their emotions and their impact on behaviour, use simple strategies to manage feelings and begin to understand others'	Apply self-awareness to understand emotions, thoughts and behaviour, regulate emotions and actions and	Demonstrate self-awareness and self-management by reflecting on emotions and behaviour, regulating responses, building positive

interact positively with others in familiar situations.	perspectives and respond appropriately in social situations.	interact with others with empathy, making responsible choices in different contexts.	relationships and making responsible and informed decisions that support well-being.
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Standard 12: Build positive relationships through empathy, cooperation and effective interpersonal skills.

Lower Primary	Upper Primary	Middle Stage	Secondary / Higher Secondary
Interact positively with others, share and take turns, recognise others' feelings and follow simple social rules in familiar situations.	Cooperate with others in different contexts, show empathy, listen to different viewpoints and communicate respectfully in group activities.	Apply interpersonal skills to work collaboratively, manage disagreements, show empathy in different situations and build positive relationships with peers.	Demonstrate effective interpersonal skills by building and maintaining positive relationships, communicating respectfully, resolving conflicts constructively and working collaboratively in diverse contexts.

Standard 13: Make responsible decisions and respond constructively to challenges in everyday situations.

Lower Primary	Upper Primary	Middle Stage	Secondary / Higher Secondary
Make simple choices in familiar situations, such as following rules, sharing and taking turns, and seek help to manage small challenges.	Make choices by considering right and wrong, follow rules in different settings and use simple strategies to handle everyday challenges such as disagreements or mistakes.	Make informed decisions by considering options and consequences, take responsibility for actions and respond constructively to challenges such as conflicts, peer pressure and setbacks.	Make responsible and informed decisions in varied situations, evaluate consequences and risks and respond to challenges such as conflict, stress and complex situations constructive ways.

Standard 14: Demonstrate patriotism by valuing Pakistan’s constitutional principles, history and cultural heritage and contributing positively to social harmony and national development.

Lower Primary	Upper Primary	Middle Stage	Secondary / Higher Secondary
Identify national symbols, recognise important national days and show early understanding of patriotism through respect for the country and others in familiar settings.	Describe key aspects of Pakistan’s history and cultural heritage, including the contributions of Quaid-e-Azam, Allama Iqbal and other national heroes, and demonstrate patriotism through respect for diversity and shared values in everyday interactions.	Explain key features of Pakistan’s constitutional principles, history and cultural heritage, contributions of national heroes and demonstrate patriotism through responsible behaviour such as following rules, respecting diversity and participating in school or community activities.	Demonstrate understanding of Pakistan’s constitutional principles, historical development and cultural heritage, contributions of national heroes and express patriotism through responsible actions, respect for diversity and active participation in community and national initiatives.

Standard 15: Demonstrate ethical behaviour and a sense of moral and spiritual responsibility in personal and social contexts guided by the values enshrined in the Constitution of Islamic Republic of Pakistan.

Lower Primary	Upper Primary	Middle Stage	Secondary / Higher Secondary
Follow simple rules, tell the truth, show respect for others and recognise right and wrong in	Demonstrate honesty, respect and responsibility in everyday actions, understand the importance of fairness and begin to consider	Apply ethical values such as honesty, fairness and respect in different situations, take responsibility for actions and make choices based on moral understanding.	Demonstrate ethical behaviour by making informed and principled decisions, reflecting on actions and showing responsibility towards self, others and society

familiar situations.	the impact of their actions on others.		in personal and social contexts.
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Standard 16: Demonstrate environmental awareness and understanding of climate change and its impacts and take responsible action including conservation, with resilience and preparedness for environmental challenges.

Lower Primary	Upper Primary	Middle Stage	Secondary / Higher Secondary
Recognise elements of the natural environment, show care for plants and animals and practice simple habits such as saving water and keeping surroundings clean, building early environmental awareness.	Develop understanding of the environment and basic ideas of climate change, practice conservation habits such as reducing waste and saving resources and show awareness of how actions affect the environment.	Explain causes and impacts of environmental change and climate change, including climate stress, apply conservation and mitigation practices and demonstrate awareness of disaster risk reduction and responsible climate action in school and community contexts.	Demonstrate understanding of environmental systems and climate change, including climate justice, analyse impacts on communities and ecosystems and take informed climate action through conservation, mitigation and preparedness, showing resilience in addressing environmental challenges.

Standard 17: Respect and value social and cultural contexts and demonstrate responsible citizenship by contributing positively at local, national and global levels.

Lower Primary	Upper Primary	Middle Stage	Secondary / Higher Secondary
Recognise differences in people, cultures and ways of living,	Describe different social and cultural practices, show respect for diversity	Explain how social and cultural contexts shape people's lives, demonstrate	Demonstrate responsible citizenship at local, national and global

show respect for others, follow simple rules and participate positively in classroom and school activities.	and practice cooperation, sharing and peaceful interactions with others in school and community settings.	responsible citizenship by respecting diversity, resolving conflicts and understanding connections between local and wider contexts.	levels by promoting respect for diversity, peaceful coexistence, conflict resolution and active participation as part of global citizenship.
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Standard 18: Demonstrate responsible digital citizenship, including safe and ethical use of technology, critical evaluation of information, media literacy and cyber safety.

Lower Primary	Upper Primary	Middle Stage	Secondary / Higher Secondary
Develop awareness of digital devices and simple practices for safe use, and use technology under adult supervision.	Use digital tools for learning, follow simple guidelines for safe and responsible use and recognise appropriate and inappropriate content.	Use digital tools to perform simple tasks such as creating documents and presentations, support learning across subjects using appropriate software, and practice safe online behaviour and demonstrate awareness of cyber safety and media influence.	Use a range of digital tools and software to support learning, research and presentation across subjects, demonstrate responsible and ethical use of technology, evaluate information critically and ensure cyber safety and making informed decisions in digital environments.

Standard 19: Develop emerging AI literacy while recognising the primacy of human agency and ensuring responsible, human-centred use of artificial intelligence.

Lower Primary	Upper Primary	Middle Stage	Secondary / Higher Secondary
Develop awareness that	Recognise that some technologies	Develop awareness of artificial intelligence	Demonstrate understanding of

some digital tools can respond to inputs and assist with simple tasks, and understand that people guide how technology is used.	use automated responses and begin to understand that these are created and guided by humans and should be used with care.	and how it is used in everyday contexts, understand that AI can make mistakes or provide incomplete information and recognise the importance of checking and verifying information using human judgment.	artificial intelligence, including its uses and limitations, and apply critical thinking to evaluate outputs, ensuring that human judgment, responsibility and ethical considerations guide the use of AI in learning and decision-making.
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Standard 20: Express ideas, identity and creativity through aesthetic and cultural forms, including arts, heritage and creative practices.

Lower Primary	Upper Primary	Middle Stage	Secondary / Higher Secondary
Express ideas and feelings through drawing and simple creative activities, and participate in classroom and school-based cultural and artistic experiences.	Develop creative expression through a range of art forms such as drawing, role play and crafts, and relate their work to familiar cultural experiences like local crafts, traditional stories etc.	Use a range of artistic forms to express ideas, experiences and perspectives, and draw on their own culture as well as other cultures through stories, crafts and everyday practices.	Create and present work using diverse artistic forms to express ideas, reflect on cultural heritage through visual arts, performances, design or media, inspired by heritage, traditions and diverse contexts contexts.

Annexure II: Core Cross-Cutting Themes

Theme	Core Sub-Themes. Description
Values and Ethics	Empathy and compassion, Respect (self, others, diversity, environment), Integrity and honesty, Responsibility and accountability, Fairness and justice, Ethical decision-making, Perseverance and self-discipline, Gratitude and humility, character building
Citizenship and Global Citizenship	Rights and responsibilities, Rule of law and civic awareness, Democratic values and participation, Community engagement and service, National identity and social cohesion, Peace, conflict resolution and tolerance, Global interdependence, Sustainable development and global responsibility
Environmental Sustainability and Climate Change	Human–environment interaction, Conservation of natural resources, water conservation, Climate change (causes, impacts, adaptation, mitigation), Biodiversity and ecosystems, Sustainable practices (reduce, reuse, recycle), Disaster risk reduction and resilience, Environmental stewardship and action, Local environmental issues and solutions, Systems thinking and interconnections
Health, Wellbeing and Safety	Physical health and fitness, Nutrition and healthy lifestyles, Personal hygiene, Mental health and emotional wellbeing, Stress management and resilience, Personal safety (home, school, community), Prevention of harmful behaviours, Socio-emotional learning (SEL) competencies, and prevention of substance abuse.
Peace and Social Harmony	Peacebuilding and non-violence, Conflict prevention and resolution, Tolerance and coexistence, Respect for diversity and pluralism, Dialogue and mutual understanding, Social cohesion and inclusion, Interpersonal harmony, Responsible citizenship for peaceful societies
Digital Literacy	Basic digital skills and tool use, Information search and evaluation, Media awareness and bias detection, Digital communication and collaboration, Online safety and privacy, Responsible digital

	citizenship, Ethical use of information and technology, Introduction to AI and data awareness, Data literacy and interpretation
Financial and Economic Literacy	Money management (saving, spending, budgeting), Needs vs wants, Financial planning and decision-making, Responsible consumption, Basic economic concepts (production, trade, markets), Livelihoods and work, Entrepreneurship and innovation, Financial responsibility and ethics
21st Century Skills (Core Competencies)	Critical thinking and reasoning, Creativity and innovation, Problem-solving, Communication (oral, written, visual), Collaboration and teamwork, Information literacy, Adaptability and flexibility, Initiative and self-direction, and interdisciplinary learning and application.
Life Skills	Decision-making, Problem-solving in real-life contexts, Interpersonal skills, Self-awareness, Self-management, Leadership, Conflict resolution, Time management and organization
Inclusion, Equity and Gender Sensitivity	Respect for diversity (cultural, linguistic, social), Gender equality and equity, Inclusion of marginalized groups, Accessibility and fairness, Anti-discrimination and bias awareness, Social justice, Empathy and acceptance, Equal participation and opportunity, Inclusive education as a systemic principle ensuring access, participation and learning for all learners, including those with diverse abilities, language backgrounds and socio-economic contexts, Differentiated instruction and learner support, Application of UDL to reduce barriers to learning, Removal of systemic and classroom-level barriers to participation and achievement
Cultural Heritage and Identity	Local traditions and practices, National heritage and history, Languages and cultural expression, Arts, crafts, and literature, Cultural diversity within Pakistan, Shared national identity, Preservation of heritage, Intercultural understanding

Theme	Description of Cross-Cutting Themes
Critical Thinking & Problem Solving	This competency involves the ability to analyze information, evaluate evidence, identify patterns, and solve problems using logical and creative approaches. It enables learners to make informed decisions and address real-world challenges effectively.
Communication	Communication refers to the ability to express ideas clearly and effectively in oral, written, and visual forms, while also listening actively and interpreting messages accurately. It supports meaningful interaction, understanding, and knowledge sharing across contexts.
Collaboration	Collaboration involves working effectively with others, respecting diverse perspectives, and contributing to shared goals. It includes teamwork, negotiation, conflict resolution, and the ability to build positive relationships in diverse settings.
Digital Literacy	Digital literacy encompasses the ability to use digital tools and technologies safely, responsibly, and effectively. It includes information evaluation, ethical use of technology, digital communication, and awareness of emerging technologies such as artificial intelligence.
Creativity & Innovation	This competency involves generating new ideas, thinking imaginatively, and applying knowledge in original ways. It supports innovation, design thinking, and the ability to adapt ideas to new situations and challenges.
Civic & Ethical Responsibility	Civic and ethical responsibility refers to understanding rights and responsibilities, demonstrating ethical behaviour, and contributing positively to society. It includes respect for diversity, social justice, environmental responsibility, and active participation in community and civic life.
Learning to Learn	Learning to learn is the ability to take responsibility for one's own learning. It includes self-awareness, goal setting, reflection, adaptability, and the capacity to learn independently and continuously throughout life.

Grade-Wise Progression of Overarching Competencies, Skills, Values, and Subject Integration
(Grades 1–12, NCF Pakistan)

Grade	Critical Thinking & Problem Solving	Communication	Collaboration	Digital Literacy	Creativity & Innovation	Civic & Ethical Responsibility	Learning to Learn	Cross-Cutting Themes	Subject Integration Examples (Pakistani Curriculum)
1	Counting, sorting, simple reasoning	Oral storytelling	Pair work in play	Intro to ICT (typing, safe use)	Drawing, imaginative play	Respect for parents, honesty	Curiosity through play	Citizenship (family roles)	Urdu/English: Moral stories; Math: Counting objects; Science: Observing plants; Islamiat: Short duas; Social Studies: Family/neighborhood
2	Word problems, basic analysis	Reading aloud	Group activities	Safe browsing basics	Creative drawing	Responsibility, sharing	Exploration habits	Equity (community helpers)	Math: Word problems in pairs; Science: Simple experiments; Islamiat: Stories of Prophets; Social Studies: Community helpers
3	Logical reasoning, simple experiments	Writing sentences	Group projects	Multimedia tools	Story writing	Fairness, diversity	Reflection	Peace & harmony	English: Short paragraphs; Science: Group experiments; Islamiat: Respect for diversity; Social Studies: National symbols

4	Problem-solving projects	Extended reading	Role-play teamwork	Safe internet practices	Creative role-play	Empathy, responsibility	Independent habits	Sustainability (cleanliness)	Math: Problem-solving projects; Science: Classification; Islamiat: Helping others; Social Studies: Civic duties
5	Project-based tasks	Group debates	Team projects	Basic coding	Innovation in projects	National identity, honesty	Resilience	Citizenship & national identity	Science: Water cycle project; English: Debates; Islamiat: Honesty; Social Studies: Provinces & identity
6	Inquiry-based experiments	Analytical reading	Case studies	Media literacy basics	Creative inquiry	Justice, fairness	Initiative	Equity & inclusion	Science: Inquiry experiments; Islamiat: Justice; Social Studies: Fairness in community
7	Scientific reasoning	Persuasive essays	Group climate projects	Responsible social media use	Innovative solutions	Environmental awareness	Adaptability	Sustainability & environment	Science: Climate change projects; Islamiat: Environmental stewardship; Social Studies: Local government
8	Research projects	Research presentations	Civic engagement projects	ICT fluency	Innovation in teams	Civic responsibility	Self-direction	Citizenship & civic duty	Science: Renewable energy research; Islamiat: Civic responsibility; Social Studies: Mock elections

9	Complex problem-solving	Academic essays	Leadership in projects	Coding, AI basics	Designing solutions	Rights & responsibilities	Lifelong learning	Constitution & civic duty	Math: Real-world problems; English: Essays; Islamiat: Citizen rights; Social Studies: Constitution
10	Applied sciences, project management	Global debates	Collaborative labs	Advanced ICT tools	Multimedia projects	Global citizenship	Productivity	Global issues & peace	Science: Lab projects; Islamiat: Peace in Islam; Social Studies: Pakistan in UN
11	Critical analysis, innovation	Research papers	Leadership roles	AI, data literacy	Innovative projects	Intercultural competence	Self-directed learning	Equity & inclusion	Science: Innovation projects; Islamiat: Interfaith harmony; Social Studies: Comparative cultures
12	Policy analysis, entrepreneurship	Policy presentations	Civic leadership	Ethical AI use	Entrepreneurship projects	Integrity, accountability	Career adaptability	Peace & social harmony	Social Studies: Policy analysis; Economics: Entrepreneurship; Islamiat: Ethical leadership

Annexure III: Examples of Curriculum Structure

Table 1: Subject Competencies

Subject	Example of Competencies
English (EFL)	Communicative competence, intercultural awareness
Science	Scientific inquiry, evidence-based reasoning
Social Studies	Civic competence, historical inquiry

Table 2: Subject Strands

Subject	Example of Strands
English (EFL)	Reading and Comprehension
Science	Life Sciences, Physical Sciences, Earth and Space Sciences
Social Studies	History, Geography, Civics, and Citizenship

Table 3: Subject Competencies and Standards

Subject	Example of content and competency strand	Example of Standards
English (EFL)	Communicative competence, intercultural awareness	Learners construct and understand spoken and written texts in English for everyday communication with clarity and coherence appropriate to their grade level.
Mathematics	Numbers and operations	Learners understand numbers and operations, apply numerical reasoning, and solve problems with accuracy and appropriate strategies relevant to their grade level.
Science	Scientific inquiry, evidence-based reasoning	Learners design and conduct simple scientific investigations, collect data systematically, and draw logical conclusions based on evidence.
Social Studies	Civic competence, historical inquiry	Learners explain civic rights and responsibilities and demonstrate informed participation in democratic and community life.

Table 4: Examples of Subject Standards and Benchmarks across grades

Subject	Standards	Benchmarks Upper Primary (3-5)	Benchmarks 6-8	Benchmarks 9-10	Benchmarks 11-12
English	Communicate effectively and appropriately in spoken and written English.	Communicate simple ideas, information, and feelings in familiar contexts, orally and in writing using basic English vocabulary.	Communicate ideas, experiences, and information in structured spoken and written English texts in everyday life and in academic contexts.	Communicate confidently, coherently and purposefully in spoken and written English across academic, social, and real-world contexts.	Communicate fluently and effectively in complex academic, professional, and social contexts using appropriate language.
Social Studies	Analyze historical events and processes to explain continuity and change over time and their impact on contemporary societies.	Recognize that the past is different from the present.	Place historical events and processes in chronological order.	Analyze historical events within broader social, political, and economic contexts.	Critically analyze complex historical processes across regions and time periods.

Table 5: Subject Standards and SLO

Standard (Social Studies)	Benchmark	Lower Primary		Upper Primary		
		SLO Grade 1	SLO Grade 2	SLO Grade 3	SLO Grade 4	SLO Grade 5
Students analyze historical events and processes to explain continuity and change over time and their impact on contemporary societies.	Recognize that the past is different from the present	Identify simple differences between life in the past and life today using familiar examples (e.g., toys, homes, school)	Describe how daily life (e.g., clothing, transport, communication) has changed from the past to the present.	Compare aspects of life in the past and present and explain one reason why changes occurred.	Analyze examples of continuity and change in local or national history by identifying what has changed and what has remained the same over time.	Explain how changes from the past to the present have influenced people's lives today using historical examples.

Annexure IV: Bloom's Taxonomy

Cognitive Domain

Level	Description (What learners do)	Suggested Action Verbs for SLOs
1. Remembering	Retrieve facts, terms, and basic concepts	define, list, recall, identify, name, label, recognize, state
2. Understanding	Explain ideas or concepts in own words	describe, explain, summarize, interpret, classify, compare, discuss, comprehend
3. Applying	Use knowledge in new situations	apply, demonstrate, solve, use, implement, illustrate, calculate
4. Analysing	Examine relationships and structure	analyze, differentiate, compare, contrast, categorize, examine, infer
5. Evaluating	Make judgments based on criteria	evaluate, justify, critique, assess, defend, argue, prioritize
6. Creating	Generate new ideas, products, or solutions	create, design, develop, construct, formulate, compose, propose

Affective Domain (Values, Attitudes, Dispositions)

Level	Description	Suggested Verbs for SLOs
Receiving	Willingness to attend and be aware	listen, attend, identify, show awareness, follow
Responding	Active participation and engagement	respond, participate, discuss, contribute, comply
Valuing	Attach value or importance	appreciate, respect, support, demonstrate, justify
Organizing	Integrate values into priorities	organize, compare, integrate, prioritize, reconcile
Characterizing	Act consistently with values	act, internalize, advocate, practice, display, model

2. Psychomotor Domain (Skills, Performance, Action)

Level	Description	Suggested Verbs for SLOs
Perception	Use sensory cues to guide action	detect, recognize, select, identify
Set	Mental, physical readiness to act	prepare, position, show readiness, initiate
Guided Response	Early stage of learning skills	imitate, follow, replicate, practice
Mechanism	Perform with confidence and control	perform, demonstrate, execute, operate
Complex Overt Response	Perform complex tasks accurately	coordinate, refine, master, adapt
Adaptation	Modify skills for new situations	adapt, adjust, modify, reorganize
Origination	Create new movement patterns	design, construct, create, innovate

Annexure V: Example of Mandatory Teacher Professional Development

Rationale

The development of a systematic and mandatory framework for professional development (PD) is paramount to enhancing the instructional capacity and leadership pipeline. It outlines a rigorous approach to teacher training, directly linking career advancement: specifically, promotion through the Departmental Promotion Board (DPB) to the acquisition of requisite professional competencies and credit hours. This structure shifts PD from an optional activity to a crucial component of service delivery quality, aligning with international best practices that prioritize sustained, quality professional learning and measurable teacher effectiveness.

Goals and Scope of the Framework

The framework establishes two tiers of mandatory training to govern all career movements from entry to senior leadership:

Induction Training: A mandatory 48-hour (3 Credit Hour) program for all newly inducted staff, spanning Elementary School Teachers (ESTs) to Assistant/Associate Professors, and newly inducted Vice Principals and Principals.

Continuous Professional Development (CPD): A mandatory 96-hour (6 Credit Hours) program required at each stage of the job cycle for eligibility for promotion to the next Basic Pay Scale (BPS) level.

This structure is necessary to ensure that educators continually meet the evolving demands of the education sector, particularly concerning digital literacy, data-driven pedagogy, and ethical practice. The primary goal of Professional Development is to strengthen teacher learning outcomes, including deepened subject knowledge, pedagogical skill, and the capacity for sound professional judgment in diverse classroom contexts. Through sustained and reflective PD, teachers improve instructional practices, learner engagement, assessment quality, and inclusive classroom environments.

Recognition and promotion are positioned as consequential outcomes of demonstrated professional growth and improved classroom practice, rather than as the primary purpose of PD, ensuring that career progression is grounded in authentic teaching excellence and educational impact.

Foundational Principles: Policy and Statutory Framework

For this framework to be effective, its requirements must be legally binding and administratively enforceable. The concerned Directorate(s) must issue a specific Statutory Regulatory Order or Service Rule Amendment to codify these training requirements as mandatory prerequisites for service confirmation and promotion.

Mandatory Provision and Credit System: The Regulatory Basis

The policy instrument must define strict adherence criteria to prevent the professional development requirement from being treated as discretionary.

Mandate for Induction: Induction Training (48 hours/3 CH) is mandated for all newly inducted staff (EST, SET, SST, Lecturers, Assistant Professor, Associate Professor). Completion must occur within a stipulated period (e.g., six months) and is a precondition for confirmation of service or Termination of Probation

Mandate for Promotion: CPD totaling 96 hours (equivalent to 6 CH) is established as a mandatory prerequisite for eligibility to appear before the Departmental Promotion Board (DPB). The policy must explicitly state that failure to complete these required 6 credit hours of stage-specific training will result in the mandatory refusal of promotion consideration by the DPB.

Quality Assurance and Policy Alignment:

Making PD mandatory carries the inherent risk that teachers may prioritize compliance over genuine professional growth, potentially leading to minimal improvement in actual classroom practices. To counteract this, the Directorate policy must embed rigorous monitoring and evaluation (M&E) mechanisms. These mechanisms should not focus solely on attendance but on assessing the fidelity of implementation in the classroom, supported by evidence from supervisors and principals.

Table 1: Mandatory Induction Program (MIP) Curriculum Outline (48 Hours / 3 Credit Hours)

Module Area	Content Components	Contact Hours	Focus Competency
I. Professional Foundation & Ethics	Directorate Policy, Code of Conduct, Institutional Structure, Professional Learning Communities (PLCs).	8	Professional Identity
II. Core Pedagogy & Classroom Practice	Teaching Techniques, Inquiry-Based Learning, Project-Based Learning (PBL), Classroom Management.	16	Instructional Delivery

III. Assessment, Data, and Curriculum	Curriculum Understanding, Assessment & Evaluation (F/S), Student Data Collection, Basic Data-Based Decision Making.	8	Decision Making & Planning
IV.. Technology & Rights (Integrated)	Educational Technologies, Use of AI in T/L, Child Rights, Prohibition of Corporal Punishment.	8	Ethical & Digital Practice
V. Elementary Specialization (FLN)	Foundational Literacy and Numeracy (Phonics, Number Sense), Early Grade Assessment, Assessment Tools (Standardized)	8	Remedial Expertise
Total		48 Hours / 3 Credit Hours	

Table 2: Mandatory CPD Curriculum for Teacher Promotion (96 Hours / 6 Credit Hours)

Competency Block	Content Focus	Contact Hours	Promotion Stage Focus	Assessment/Deliverable for DPB
I. Research & Theory	Action Research methodology; Teaching theories; Student psychology; Differentiated instruction.	32		Submission of a completed Action Research Project Addressing a specific classroom challenge.
II. Data & Application	Student Data Analysis, Informed Decision Making; Developing projects based on Subject	32		Data Portfolio demonstrating modification of practice based on analyzed student outcomes.
	Learning Outcomes (SLOs); Diagnostic & Remedial Planning.			

III. Digital Innovation	Advanced Teaching Technologies; Digital Competencies & Framework alignment; Deep integration of AI in instruction/resource creation.	32		Digital Portfolio demonstrating mastery (e.g., "Silver" level) in digital competency domains.
Total		96 Hours / 6 Credit Hours	Required for one stage promotion (e.g. BPS 16 to BPS 17)	

Annexure VI: Situation Analysis and Tool

1. Situation Analysis:

Curriculum cycle begins with diagnosing learner, societal, and system needs. This includes analysis of:

- i. Learner performance and equity gaps
- ii. Workforce and future skills demands
- iii. Changes in knowledge, culture, and community priorities
- iv. System readiness (teachers, resources, infrastructure)
- v. International best practice places strong emphasis on this stage. NCCW, in collaboration with provincial authorities, should institutionalize:
- vi. Subject-wise situation analysis before curriculum development
- vii. Formal evaluation of existing curricula to inform revisions

2. Curriculum Design and Development

Curriculum design involves defining purpose, learning outcomes, content structure, pedagogy, assessment, and progression. Informed by needs assessment, NCCW and provincial bodies guide experts to:

- i. Revise learning outcomes and competency frameworks
- ii. Adjust subject structure, sequencing, and progression
- iii. Integrate cross-cutting competencies and thematic links
- iv. Align pedagogy, assessment standards, and resource needs

3. Capacity Building and Resource Development

Before implementation, concerned departments (the systems) must ensure readiness through:

- i. Teachers' professional development led by teacher education institutions
- ii. Development of textbooks, guides, and digital resources by textbook boards
- iii. Orientation of school leadership
- iv. Provision of infrastructure and support systems by provincial departments.

4. Implementation

Curriculum moves from policy to practice through:

- i. Phased rollout, including piloting before scaling
- ii. Teacher orientation focused on learning outcomes
- iii. Classroom support, mentoring, and flexibility for local adaptation
- iv. Clear communication with schools and communities
- v. Piloting may be outcome-based or material-based, conducted for a full academic year using representative samples of schools.

5. Monitoring and Assessment

Implementation is continuously monitored to assess quality and challenges using:

- i. Classroom observations
- ii. Teacher feedback
- iii. Learner assessments (formative, summative, national exams)
- iv. Equity and access data
- v. National and international assessment results
- vi. NCCW and provincial partners analyze evidence to inform timely improvements.

6. Evaluation and Review

Formal curriculum evaluation is typically conducted every 5–10 years, complemented by ongoing feedback. Effective systems:

- i. Collect implementation data from the first year
- ii. Engage stakeholders (teachers, students, parents, experts)
- iii. Use research studies and consultations to assess impact and feasibility

7. Revision and Renewal

Based on evaluation findings, NCCW leads curriculum renewal by:

- i. Establishing curriculum review committees
- ii. Defining revision scope and timelines
- iii. Adjusting depth, breadth, and progression
- iv. Consulting provinces and stakeholders
- v. Finalizing, approving, and notifying revised curricula
- vi. Updating learning materials and initiating teacher training

Situation Analysis Tool

Scale: 1 = Strongly Disagree | 2 = Disagree | 3 = Neutral | 4 = Agree | 5 = Strongly Agree

No	Statement	1	2	3	4	5
A. Policy Alignment & Relevance						
1	The curriculum aligns with national education goals and development priorities.	☐	☐	☐	☐	☐
2	The curriculum reflects current societal, economic, and global needs.	☐	☐	☐	☐	☐
3	Cross-cutting priorities are clearly embedded across subjects.	☐	☐	☐	☐	☐
B. Learning Outcomes & Progression						
4	Learning outcomes are clearly stated and easy to understand.	☐	☐	☐	☐	☐
5	Learning outcomes are appropriate for the grade level.	☐	☐	☐	☐	☐
6	There is clear progression of learning across grades (vertical alignment).	☐	☐	☐	☐	☐
7	Subjects at the same grade level are well coordinated (horizontal alignment).	☐	☐	☐	☐	☐
C. Content Load & Organization						
8	The amount of content per grade is manageable within the available time.	☐	☐	☐	☐	☐
9	Content allows sufficient depth of learning.	☐	☐	☐	☐	☐
10	There is a good balance between breadth and depth of content.	☐	☐	☐	☐	☐
D. Teaching & Learning Approaches						
11	Suggested teaching strategies support the learning outcomes.	☐	☐	☐	☐	☐
12	Teaching approaches are realistic for typical classroom conditions.	☐	☐	☐	☐	☐
13	The curriculum promotes active, learner-centred teaching.	☐	☐	☐	☐	☐
E. Assessment Alignment						
14	Assessment methods align with learning outcomes.	☐	☐	☐	☐	☐
15	Assessments allow students to demonstrate understanding and skills.	☐	☐	☐	☐	☐

16	Assessment demands are appropriate for the grade level.	☐	☐	☐	☐	☐
F. Resources & Teacher Capacity						
17	Teaching and learning materials support curriculum implementation.	☐	☐	☐	☐	☐
18	Teachers are adequately prepared to implement the curriculum.	☐	☐	☐	☐	☐
19	Professional development supports curriculum implementation.	☐	☐	☐	☐	☐
G. Equity & Inclusion						
20	The curriculum addresses diverse learner needs.	☐	☐	☐	☐	☐
21	Content is inclusive and culturally responsive.	☐	☐	☐	☐	☐
22	All learners have equitable opportunities to achieve outcomes.	☐	☐	☐	☐	☐
H. Overall Effectiveness						
23	The curriculum prepares students for further education, work, and life.	☐	☐	☐	☐	☐
24	The curriculum supports critical thinking and problem-solving.	☐	☐	☐	☐	☐
25	Overall, the curriculum is effective and fit for purpose.	☐	☐	☐	☐	☐

Optional Comment

Please list key issues that should be prioritized in curriculum revision:

Annexure VII: RDI Framework

A well-defined institutional framework is essential for strengthening Research, Development and Innovation (RDI) within the school education system. Effective institutions provide structure, coordination and continuity to ensure that research findings are translated into improved curriculum, teaching practices and assessment systems. In Pakistan, the RDI framework for school education operates through coordinated efforts at federal, provincial and regional levels. Within the NCF, this institutional arrangement supports evidence based policymaking, curriculum improvement and continuous enhancement of learning outcomes across schools.

Institutional Roles

All official education institutions responsible for development of quality products also have research functions. These include the National Curriculum Council Wing (NCCW) at the Federal level and its counterparts in the provinces, the provincial textbook boards, institutes of teacher training and all examination boards. In addition, Pakistan Institute of Education (PIE) also has a mandate for policy research. All these mandates are either dormant or underutilised. These institutions, responsible for educational research, data collection, large-scale learning assessments and system monitoring, provides reliable information to guide curriculum planning, evaluation and reform in school education. Curriculum development and assessment bodies are responsible for designing, reviewing and updating curriculum frameworks, syllabi, textbooks and assessment systems. By using research findings and assessment data, these bodies can ensure alignment between learning objectives, classroom instruction and evaluation practices. Provincial and regional education departments can support RDI by conducting localized studies, monitoring curriculum implementation and identifying context-specific challenges. Their role is essential in adapting national curriculum standards to regional needs while maintaining overall coherence.

Inter-Institutional Coordination

Effective RDI requires strong coordination among institutions working at different levels of the education system. The NCF emphasizes structured collaboration through coordination committees, technical working groups, shared data systems and joint research initiatives. Such coordination helps reduce duplication of efforts, promotes sharing of research findings and best practices and aligns curriculum development and assessment with national priorities. Through coordinated institutional efforts, RDI activities become more efficient, coherent and impactful, ensuring that curriculum reforms are evidence-based and responsive to school-level realities.

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References

- Alexander, R. (2008). *Essays on pedagogy*. Routledge.
- Biggs, J., & Tang, C. (2011). *Teaching for quality learning at university* (4th ed.). Open University Press.
- Black, P., & Wiliam, D. (1998). Assessment and classroom learning. *Assessment in Education: Principles, Policy & Practice*, 5(1), 7–74.
- Bloom, B. S. (1956). *Taxonomy of educational objectives*. Longman.
- Bransford, J. D., Brown, A. L., & Cocking, R. R. (Eds.). (2000). *How people learn: Brain, mind, experience, and school*. National Academy Press.
- Bruner, J. S. (1960). *The process of education*. Harvard University Press.
- CAST. (2018). *Universal design for learning guidelines version 2.2*. CAST.
- Constitution of the Islamic Republic of Pakistan. (1973).
- Council of Europe. (2001). *Common European Framework of Reference for Languages: Learning, Teaching, Assessment*. Cambridge University Press
- Cummins, J. (1979). Cognitive/Academic Language Proficiency, Linguistic Interdependence, the Optimum Age Question and Some Other Matters. *Working Papers on Bilingualism*, No. 19.
- Darling-Hammond, L. (2000). Teacher quality and student achievement. *Education Policy Analysis Archives*, 8(1).
- Darling-Hammond, L., & Bransford, J. (2005). *Preparing teachers for a changing world*. Jossey-Bass.
- Dewey, J. (1938). *Experience and education*. Macmillan.
- Freire, P. (1970). *Pedagogy of the oppressed*. Continuum.
- Government of Pakistan, Ministry of Federal Education and Professional Training. 2017. *National Curriculum Framework Pakistan*. Islamabad, Pakistan: Ministry of Federal Education and Professional Training
- Government of Pakistan. (1947). *Proceedings of the Pakistan Educational Conference*. Ministry of Education.
- Government of Pakistan. (1959). *Report of the Commission on National Education*. Ministry of Education.
- Government of Pakistan. (1976). *Federal supervision of curricula, textbooks and maintenance of standards of education act, 1976*.

- Government of Pakistan. (2009). National education policy 2009. Ministry of Education.
- Government of Pakistan. (2009). National professional standards for teachers. Ministry of Education.
- Government of Pakistan. (2023). National curriculum of Pakistan. Ministry of Federal Education and Professional Training.
- Government of Pakistan. (2024). NEPDF 2024): Guidelines for Federal and Provincial Education Policies. Islamabad: Ministry of Federal Education and Professional Training.
- Hattie, J. (2009). Visible learning. Routledge.
- International Association for the Evaluation of Educational Achievement. (2020). TIMSS 2019 international results in mathematics and science.
- Karunanithi, P., & Sivanathan, I. (2025) The Role of Mother Tongue in Shaping Educational Outcomes. International Journal of academic research in social science. Vol 15, Issue 8. DOI Link: <http://dx.doi.org/10.6007/IJARBSS/v15-i8/26307>
- Koehler, M. J., & Mishra, P. (2009). What is technological pedagogical content knowledge? Contemporary Issues in Technology and Teacher Education, 9(1), 60–70.
- OECD. (2018). The future of education and skills: Education 2030. OECD Publishing.
- OECD. (2019). OECD learning compass 2030. OECD Publishing.
- OECD. (2020). Curriculum overload: A way forward. OECD Publishing.
- Pakistan Bureau of Statistics, Household Integrated Economic Survey (HIES) 2024–25 and PSLM Social Report 2024–25. Government of Pakistan
- Pakistan Institute of Education. (2025). Pakistan Education Statistics 2023–24. Ministry of Federal Education and Professional Training, Government of Pakistan
- Piaget, J. (1969). The psychology of the child. Basic Books.
- Shaeffer, S. F. (2020). Mother Tongue and Early Childhood Care and Education: Synergies and Challenges. UNESCO Bangkok.
- Shulman, L. (1986). Those who understand: Knowledge growth in teaching. Educational Researcher, 15(2), 4–14.
- Shulman, L. (1987). Knowledge and teaching: Foundations of the new reform. Harvard Educational Review, 57(1), 1–22.
- Snow, C. E., Burns, M. S., & Griffin, P. (Eds.). (1998). Preventing reading difficulties in young children. National Academy Press.
- Tomlinson, C. A. (2014). The differentiated classroom. ASCD.
- Tyler, R. W. (1949). Basic principles of curriculum and instruction. University of Chicago Press.

- UNESCO. (2015). Education 2030: Incheon declaration and framework for action. UNESCO.
- UNESCO. (2017). Education for sustainable development goals: Learning objectives. UNESCO.
- UNESCO. (2021). Reimagining our futures together: A new social contract for education. UNESCO.
- UNICEF. (2017). Life skills and citizenship education initiative: Conceptual and programmatic framework. UNICEF.
- United Nations. (1948). Universal declaration of human rights.
- United Nations. (1989). Convention on the rights of the child.
- United Nations. (2006). Convention on the rights of persons with disabilities.
- United Nations. (2015). Transforming our world: The 2030 agenda for sustainable development.
- Vygotsky, L. S. (1978). Mind in society: The development of higher psychological processes. Harvard University Press.
- World Bank. (2018). World development report 2018: Learning to realize education's promise. World Bank.