



NATIONAL EDUCATION POLICY DEVELOPMENT FRAMEWORK - 2024

**GUIDELINES FOR FEDERAL AND
PROVINCIAL EDUCATION POLICIES**





Table of Contents

Introduction	1
1. Why a National Education Policy Framework?	2
2. Scope	3
3. Assessing Problems in Education	4
4. Contextual Considerations	6
5. Educational Challenges	9
6. Out of School children (OOSC) & Access	17
7. Literacy & Non Formal Education (NFE)	20
8. Parallel Systems	23
9. Technical & Vocational Education and Training	26
10. Higher Education	29
11. Islamic Education	32
12. Governance Challenges	33
13. The Process for Policy Development	37
Guiding Principles	39
Annex I: Possible Prototype for Language Curriculum and Prototype	41
Annex II: Possible Distribution of Functions at Various Levels	43
Annex III: Suggested Strategies for Addressing Higher Education Needs	45
Annex IV: National Qualification Framework (NQF): Programs by Levels and Credit Hours Requirement (New System)	46
Annex V: Professional Standards for Teachers in Pakistan	47
Annex VI: Standards for Model Assessment Framework (MAF) 24 in Pakistan	48
Bibliography	49



List of Contributors

1. Dr. Khalid Maqbool Siddiqui, Federal Minister for the Ministry of Federal Education and Professional Training (MoFEPT)
2. Mr. Mohyuddin Ahmad Wani, Federal Secretary for the Ministry of Federal Education and Professional Training (MoFEPT)
3. Dr. Muhammad Shahid Soroya, Director General, Pakistan Institute of Education (PIE)
4. Col. Jamal Saeed Malik, PD HRD&OE, SIFC
5. Mr. Farhat Hussain Farooq, Additional Secretary (Education Reforms), School Education Department, Punjab
6. Mr. Qaiser Alam, Special Secretary, Education Department, Khyber Pakhtunkhwa (KP)
7. Dr. Fauzia Khan, Additional Secretary, Education Department, Sindh
8. Mr. Abdul Khaliq, Chief Planning Officer, Education Department, Balochistan
9. Mr. Abdus Sami Khan, Technical Lead, Oxford Policy Management (OPM)
10. Dr. Muhammad Zaigham Qadeer, Director, PIE
11. Dr. Shoaiba Mansoor, Deputy Education Advisor, MoFEPT
12. Mr. Irfan Muzaffar, Senior Consultant, World Bank
13. Mr. Abid Gill, Japan International Cooperation Agency (JICA)
14. Dr. Anwar ul Hassan Gilani, Advisor, Higher Education Commission (HEC)
15. Mr. Muneer Ahmed, Director, Higher Education Commission (HEC)
16. Dr. Shafqat Ali Janjua, Director, National Curriculum Council (NCC), Islamabad
17. Mr. Fida Bazai, Director General, National Vocational and Technical Training Commission (NAVTTTC)
18. Mr. Muhammad Asim, Deputy Director, NAVTTTC
19. Mr. Muhammad Usman Khan, Director, Inter Board Coordination Commission (IBCC)
20. Dr. Farid Panjwani, Dean IED, Agha Khan University, Karachi
21. Dr. Sajid Ali, Associate Professor IED, Agha Khan University, Karachi
22. Dr. Javed Ahmed Malik, Head of Malala Fund Pakistan
23. Dr. Baela Raza Jameel, CEO, ITA
24. Mr. Haider Ali, Research Associate, Institute of Social and Policy Sciences (I-SAPS)
25. Ms. Fajar Rabia Pasha, Executive Director, Pakistan Alliance for Girl Education (PAGE)
26. Ms. Riffat Jabeen, Director Academics and Quality Assurance, Federal Directorate of Education (FDE)



Acknowledgements

The development of the National Education Policy Development Framework (NEPDF 2024) is a collaborative effort, made possible by the valuable contributions, insights, and expertise of the Federal Ministry of Education, Provincial and Area Education Departments (Punjab, Sindh, Khyber Pakhtunkhwa, Balochistan, Azad Jammu and Kashmir and Gilgit-Baltistan), and numerous partner organizations. Their dedication and commitment remain instrumental in shaping a comprehensive and inclusive policy framework that addresses the diverse educational challenges of Pakistan. This collective effort reflects a shared vision of improving education across the country, ensuring its relevance to regional and national needs.

We would like to extend our heartfelt gratitude to the Federal Minister for Education Dr. Khalid Maqbool Siddiqui and Ms. Farrah Naz Akbar, Parliamentary Secretary Ministry of Federal Education and Professional Training (MoFEPT), for their leadership and unwavering support throughout this initiative. Their vision and guidance provided the foundation for the development of this framework. The provincial consultation process led by the provincial education secretaries Mr. Khalid Nazir Wattoo (Punjab), Mr. Zahid Ali Abbasi (Sindh), Mr. Masood Ahmad (KP), Mr. Saleh Mohammad Nasar (Balochistan), Mr. Razzaq Ahmed Khan (AJK) and Mr. Fareed Ahmad (Secretary Higher Technical & Special Education, GB) played a pivotal role to ensure the framework of the inclusivity and its contextual relevance. Their inputs were vital in aligning the framework with the unique needs of their respective regions.

We appreciate the Special Investment Facilitation Council (SIFC) for its holistic approach and unwavering commitment to fostering collaboration among federal and provincial governments and departments. The SIFC's contribution under the leadership of Lieutenant General Sarfraz Ahmad and Major General Luqman Hafeez have been instrumental in ensuring an integrated and unified effort in the development of the National Education Policy Development Framework 2024. Their support has laid the foundation for addressing critical challenges in the education system of Pakistan.

Our deepest appreciation goes to Dr. M. Shahid Soroya, Director General Pakistan Institute of Education (PIE), Dr. Muhammad Zaigham Qadeer, Director Policy Research Wing (PRW) of PIE, Dr. Shoaiba Mansoor, Deputy Education Advisor at MoFEPT for their exceptional leadership and the team including Dr. Munir Khan Khattak (AIOU), Syeda Samana Ali, Mr. Sohail Ajmal, Ms. Misbah Azhar and Ms. Humaira Aziz in coordinating, designing and editing this monumental effort.



The involvement of our partner organizations was pivotal to the successful development of the NEPDF 2024. We extend our heartfelt gratitude to Oxford Policy Management (OPM). Our special recognition goes to Mr. Abdus Sami Khan from OPM for his instrumental role in providing technical assistance throughout the development process. The Policy Research Wing (PRW) of PIE developed the initial draft through consultations with academia, development partners, and provincial stakeholders, focusing on access, quality and Technical & Vocational Education and Training (TVET). Feedback was integrated following reviews with entities like HEC, NAVTTC, and National Curriculum Council (NCC).

We are also grateful to the Japan International Cooperation Agency, World Bank, Foreign Commonwealth and Development Office (FCDO), Malala Fund Pakistan, Agha Khan University (AKU), Pakistan Alliance for Girls Education (PAGE), and Idara-i-Taaleem o Agahi (ITA) for their essential technical expertise and insights. Their collective efforts ensured the development of a comprehensive and exclusive framework that effectively addresses the educational challenges of Pakistan. The extensive provincial consultations ensured adaptability to regional needs. A National Technical Working Group (NTWG) was formed to refine the draft for submission to MoFEPT.

The NEPDF 2024 was developed in response to the education emergency declared by the Prime Minister to address critical challenges like Out-of-School Children (OOSC). The Special Investment Facilitation Council (SIFC) collaborated with the Ministry of Federal Education and Professional Training (MoFEPT) for the development of a comprehensive framework, with the Pakistan Institute of Education (PIE) assigned to lead its formulation.

The NEP 2024 Framework is a unified effort to create a cohesive and transformative roadmap for Pakistan's education system. It has been agreed that the federal, provincial, and area education departments will develop their policies in three months' time.

I sincerely thank all our partners and contributors for their unwavering support and invaluable contributions to the development of the NEP 2024 Framework.

Mr. Mohyuddin Ahmad Wani
Federal Education Secretary



INTRODUCTION

This document has been prepared in view of the 'Education Emergency' declared by the Prime Minister of Pakistan. It provides a set of guidelines for all governments (Federal, provincial and regional) to review their policies on education – including approaches to improve implementation. The 'Framework' outlines the scope of educational challenges that need to be addressed for our children to have a bright future in an everchanging world. Areas covered include early childhood education, school years up to higher secondary, non-formal education and literacy, higher education and technical & vocational education.

The document outlines the scope of issues, identifies some of the core factors in each area identified that justify its inclusion in policies and poses a set of questions for consideration of policy makers. The list of issues discussed is not exhaustive and the details of each problem have been confined to the basics. Policy developers can use the document to expand on the issues, add the required (contextual) details and also expand the set of questions for problem identification and development of recommendations.

The Framework highlights the range of challenges faced in designing education policies in Pakistan. We are struggling with fundamentals like foundational literacy and numeracy, an overall low literacy rate and continued exclusion of the girl child and children with special needs. At the same time, we need to prepare our children, as they enter higher levels of education, for the challenges of modern times: digital literacy and the ability to engage with the emerging areas of artificial intelligence and adaptation to climate change. Policies will have to capture these variegated sets. Each requires different perspectives and approaches.

At a systemic level the diversity across each province and scale of education delivery are important variables, often, inadequately accommodated in policies and plans. This excludes children whose context, including the language endowments, do not match the expectations of the curriculum. The Framework recognises the need to review all inputs as per the context of the child, which would require recognition of diversity.

The Framework also flags the implications of scale on ambitions of policies. As systems expand further the quality and number of teachers required may not be available in the market.

Already all provinces face shortages of teachers and are adjusting policies to maximise recruitment. It will not be easy as the education sector competes for scarce quality human resource in the market. Further, the economic situation in the country after the COVID years and the global environment will limit availability of financial resources available.

Pakistan has not met its promise. Low education achievements continue to suppress progress in all fields. Improvements in the education sector have been small and painfully slow. The country is still struggling to meet the international commitment on Sustainable Development Goals (SDGs) specifically SDG 4 that calls for quality education for all. Primarily, the inability has not necessarily been due to lack of policies. The failure, arguably, and primarily, lies in implementation. However, policies remain imperative to set the right direction by including approaches that will improve implementation. National Education Policy 2009 was the last approved policy document. Drastic changes occurred in the last fifteen years as lessons have emerged from initiatives of the provinces and the Federal government. Improved understanding of education processes has developed through international and domestic research, economic drivers of economy have begun to transform in the light of the exponential shifts in the digital world, losses in schooling have been witnessed in the years of the COVID pandemic and the risks of a deteriorating global climate become starker. Pakistan has already witnessed the impact in the form of floods and droughts and their consequences for schooling. New policies, after reassessing the situation, are overdue.



1. WHY A NATIONAL EDUCATION POLICY FRAMEWORK?

Today Pakistan faces a national education crisis, declared as an “Education Emergency” by the Government of Pakistan. There are 26 million children of school age who are out of schools and a majority of those in schools are not learning. Roughly, as per practitioners consulted, not more than 5% of children are receiving good quality education. No province can claim to be free of these educational crises. Given the centrality of an educated workforce in economic and social development, it can be claimed that these shortcomings contribute to the overall low ranking in the human development index (HDI). Pakistan ranks at 164 out of 193 countries. The position has remained unchanged since 1990, the year when the Index started, and the improvement in HDI between 1990 and 2022 has been of 1 percentage point only. The need to sharply improve the quality of human resource through quality education has never been more urgent. This will require a national effort through participation of all provincial governments and the Federal government as per their respective mandates.

Human Development Index

The composite human development index of UNDP consists of four indices: life expectancy at birth (SDG 3); expected years of schooling (SDG 4.3); mean years of schooling (SDG 4.4); and Gross National Income (GNI) per capita. The numbers for Pakistan are as follows:

Life Expectancy at Birth	66.4 years
Expected Years of Schooling	7.9 years
Mean Years of Schooling	4.4 years
GNI per capita	5,374 (in US \$ at Purchasing Power Parity (2017))

If GNI per capita is the only indicator used then the ranking rises from 164 to 137. The weight of poor schooling outcomes in pushing down the HDI is clearly greater than other indicators.

The 18th Constitutional Amendment shifted the responsibility of educational design and delivery to the provinces, making them responsible for policy, planning, curriculum and every other aspect of education. The Federal government has the responsibility for service delivery in Islamabad

Capital Territory (ICT). The Amendment shifted complete responsibility to the provincial governments who can now develop and implement policies suited to their contexts. However, the need for national coordination and cross learning continued to be recognised and in the last few years provinces have cooperated on learning from each other. At times national dialogues have been necessitated on issues where provinces wanted to build better consensus and cohesion. The Federal government functioned as a facilitator in some of these processes. Additionally, our obligations of reporting on developments of global targets, specifically the Sustainable Development Goals (SDGs) also require coordination across the federating units and the Federal government.

As a federation, the country needs a balance between autonomous policy development within each province and nationally agreed standardised frameworks. This need has been raised on multiple occasions by both the Federal and provincial governments. It is realised that some problems are too massive to be addressed separately by an individual provincial government despite the mandate. For example, the need for minimal national standards has been recognised in the Minimum National Quality Standards for Education developed, by all provincial governments and the Federal government, in 2018 and similar other documents (Annex-V & VI).

Therefore, the Federal government has developed this National Education Policy Development Framework (NEPDF) 2024 in partnership with the provincial governments as a document that can contribute to the preparation of provincial education policies. The guidelines provided can both, respond to particular needs of the provinces and ensure a degree of cohesiveness in terms of quality, standards and outcomes of education.

The Framework identifies key components that are important to consider in development of provincial policies. It also indicates the reasons for inclusion of these components. The areas highlighted are not exhaustive but provide a useful departure point for discussions. A set of questions critical to each area has also been raised at relevant places. The document also suggests a process for preparation of education policies that are child centred and grounded in the contextual reality of each province. It also outlines a set of guidelines for inclusion of some fundamental structures in policies.



2. SCOPE

Formal education in Pakistan starts with pre-primary early childhood education and development and continues into higher education and technical and vocational education training. The Framework covers all three with the limitation that the primary focus is on school education. School education constitutes 14 years from pre-primary ECE (1 years) to the end of higher secondary school, as per the scope given in Pakistan National Curriculum (PNC). Formal schooling is provided by public and private schools. Both systems are internally varied, the latter more than the former[1].

Governments, in addition to having schools fully in their ambit, also deliver education through public private partnerships with the largest set of institutions managed under the model by the Punjab Education Foundation (PEF), followed by Sindh Education Foundation (SEF). Private schools range from low cost to expensive, elite institutions. The latter enrol less than half a percent of total number of children in schools in Pakistan. The Framework caters to all children, including those enrolled in elite private schools, with the vision that the scope and approach recognises the differences across these school systems that require flexibility in policy responses.

In addition, the formal schooling, non-formal schooling systems have been set up over the last many decades as a second chance opportunity for children who either never went to school or dropped out before completion. The non-formal education sector is getting renewed attention at the policy level, especially, given the high number (26 million) of out of school children. The sector has been included in the Framework. Other important streams discussed are private schools and madrassas. **Separate sections have been included on technical and vocational education and training (TVET) and higher education which will be translated into policies for these areas respectively.**

In the framework, all of the above streams have been discussed within the four standard components of education systems: quality, participation, equity, and governance & management. This Framework is not limited to schools structures or institutions but also covers curriculum, textbooks, teachers and teacher training, assessments and supervision or governance.

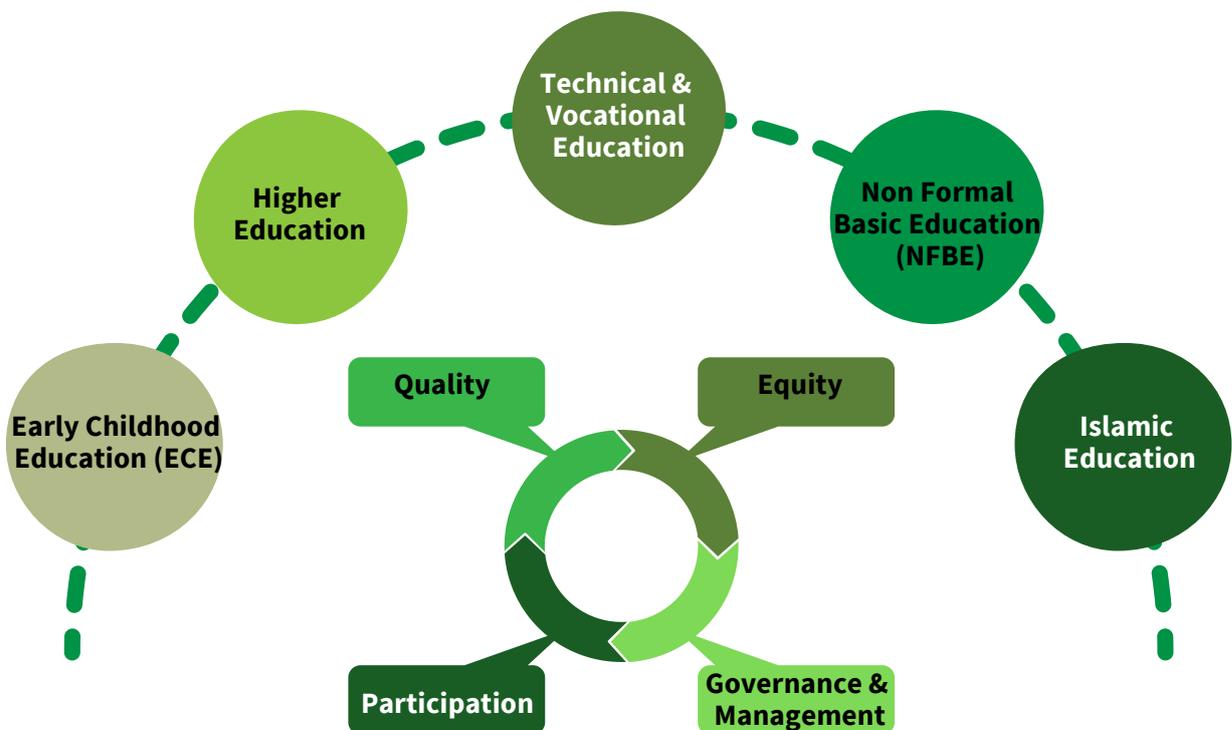


Fig 1: Standard Components of Education System and Coverage of Educational Streams

[1] Government run institutions include the schools run by the respective education departments (in the case of Islamabad by the Federal Directorate of Education) and other government entities.



3. ASSESSING PROBLEMS IN EDUCATION

The challenges of Pakistan's education system are not limited to a single level or issue. Our performance lags in all four major domains: learning or quality, relevance, access and equity. A majority of our children are left out or left behind as the gap between Pakistan's achievements in education and a vast majority of the world continues to widen. The country cannot expect to meet the aspirations of its founding fathers, and its current and future citizens with weak education outcomes. We are a long distance from the rights promised to our children in the Constitution of the Islamic Republic of Pakistan.

Under Article 25-A of the Constitution, it is the fundamental right of all children aged 5 to 16 to be admitted in schools and receive quality education. The Constitution, under its Chapter of Principles of Policy also aspires for universal literacy and expansion of opportunities of higher education. Our commitment to sustainable development goals echoes the Constitutional requirements. We have a massive difference between the aspirations and results as 26 million children are out of schools and the learning poverty is at 77% (World Bank, Pakistan Learning Poverty Brief, 2022). Among those who stay in schools, learning achievements are below the requirements of the curriculum. A large percentage fail to develop foundational literacy and numeracy skills.

The two challenges of out of school children and poor learning are correlated. Global research shows that low quality of learning influences parental decision to discontinue education (World Bank 2018). The correlation does not explain all the reasons for such large number of children not being in school but constitutes a central issue that needs more policy focus.

In the case of both quality of learning and access, inclusion is not universal. There are differences across children based on gender, socio-economic profile of their families and location. Children with disabilities are the largest set, as a percentage, who are excluded from education opportunities.

The weak outcomes continue to be evidenced despite multiple education reforms over the years in all provinces. The net result leaves Pakistan vulnerable to continued under-development, social disquiet and marginalisation in the global order. Where is the problem? Finding answers has not been easy.

Pakistan has developed 12 documents, since independence, that can either directly be referred to as national policies or has the status of one. Each policy attempted to address education issues

as per the time and comprehension of the specialists and experts involved. There has been no analysis of the reasons for failure of these policies to help Pakistan improve its performance in education.

After 77 years of independence, Pakistan has a literacy rate of 62.8% (Pakistan Economic Survey, 2023-24), a secondary net enrolment rate of 30 on average (approximately 70 to 80 percent children, depending on the province, do not enter secondary education) and more than 50% children who do not develop foundational literacy skills as late as class 5[2]. A new policy will have to begin with recognition of these challenges. To address them, policies will have to recognise some fundamentals that may help unpack complexities of the respective education systems:

1. Education operates in an open system where contextual realities of society, governance, culture, politics, language and economy, among others, have implications for its design, expectations and success.
2. Education is about the child. The design and expectations of education has to be, in early years, based on the context and realities of the child. The adage of "meet the child where the child is" has maximum relevance in the early years of education.
3. Success of an education system cannot be in isolation of important support systems like health, child protection and social welfare and household endowments like literacy rates of parents, poverty and cultural norms.
4. Education processes are a continuum where formal school education constitutes 12 years, if pre-primary early childhood education is not included. If the latter is added then a child goes through 14 years of education. Each level has its own requirements and challenges and at the same time feeds into the next stage of education. It is important to clearly recognise the child's developmental stages at each level, in addition to the contextual realities above, to prepare curricula, textbooks and pedagogies. Each stage should then have a connect on the next level. While each stage has its own requirements, and value, isolated focus on specific sub-sectors does not resolve issue of education reform.
5. With 26 million students not in school, and a continued stream of dropouts, formal school systems will not suffice. Non-formal education systems, and second chance opportunities, need a higher priority than the marginal treatment accorded over the years.

[2] Source: Various iterations of the Annual Status of Education Report (ASER)



6. Governance systems of education require massive overhauls. The structures have not grown in proportion to the increase in schools and enrolment, since independence, while the quality of the technical bureaucracy of education has declined.

7. Measurement is important. Systems that do not have measurable targets do not find a direction and cannot develop a continuous adjustment and improvement process vital to successful educational reform. While data availability has improved utilisation of data has been a weaker link in Pakistan.

The above factors require to be part of all ongoing work on education and not limited to a one time effort at the time of development of a policy or a plan. Education is a living system and requires vigilant learning from within and awareness of global trends and practices. Research and review are ongoing requirements.



4. CONTEXTUAL CONSIDERATIONS

Education policies cannot be developed in a vacuum. It can serve as an instrument for moving forward only when it is grounded in the contextual realities in which it is prepared and implemented. The greater its congruence to these realities the better chance it will have of being successful. It means the policy's design should be targeted at the problems as per the needs on ground and not unthinkingly copied from realities of other jurisdictions. Further, it should be structured in line to begin the processes through the resources and systems available. It cannot assume presence of resources that are not available and cannot be provided in the short term. Although policy can aspire to develop these resources, but its ambition cannot overshoot the speed of their development and the consequent capacity enhancement to move to the next stage.

At a national level, some of the key contextual issues to consider for any education policy are:



4.1 Population Size & Demography

The population of Pakistan is more than 220 million. Provision of quality education to all children is a massive undertaking in every province and district. Each year about 600,000 children enter the population. **The first and most alarming situation is the overall, high, population growth rate** that continues to increase pressure on resources and social development. Other three dimensions of demography that are relevant to the analysis are:

- Urbanisation
- Population densities
- Internally displaced populations and refugees.

4.1.1 Urbanisation

Urbanisation is common across all provinces in Pakistan, as the country, similar, to the global trend has urbanised rapidly in the last three decades. As per the National Population Census nearly 36% of the population and estimates predict that by 2025 the share will rise to 50%.

Populations in towns and cities are receiving migration from rural areas. In some cities this growth rate exceeds 5% per annum (Islamabad and Quetta). Urbanisation, especially when unplanned, creates its unique challenges of social service delivery as informal settlements, urban poverty and sprawl grow. **Slums as habitats of urban poverty continue to grow and their problems including provision of basic civic and social services are unattended.** Practically, the bulk of education delivery in urban areas has been taken up by small, low cost, private schools. As all governments find it prohibitively expensive to acquire urban land. Most old government schools, available in the larger cities, are away from many population pockets of the poor. As a result, it is less expensive to admit children in a nearby, fee charging, private school than paying the transport costs for the distances needed to reach public institutions. Safety factors, due to distances, also dis-incentivize travel for children, especially, girls.

The problem of delivery to the poorest in urban areas is a different challenge than in rural settings. Poverty in urban areas is located spatially, normally, pockets around affluent areas. Quality of services in these areas is poor, social structures are weaker as even the family support systems are less stable than in rural areas. This weakens community involvement, among other social delivery issues, in schools. Despite the requirements and the risks, there are no separate statistics available for school dropouts and learning challenges in poor dwellings in urban centres as data clubs all urban numbers. This hides issues of education of the urban poor.

4.1.2 Population Density

Population density is an important dynamic. In the three larger provinces of Punjab, Sindh and Khyber Pakhtunkhwa population densities are high. In Balochistan and parts of Gilgit-Baltistan population densities are low. The criterion for establishment of schools in these areas has to differ from the high-density provinces and districts. Similarly, per unit cost will also be higher. Management and delivery model, similar to the design of delivery, need to consider diversity in population density for effective delivery to the last mile and every child.



4.1.3 Internally Displaced Persons

Internally displaced persons have increased in Pakistan, especially, in the western part of the country. Violence and natural disasters have been the key causes of displacements. While some displacements have been temporary, others have been prolonged. Services for these populations, including education, have been massive challenges. Systems need to develop flexibility and the capacity to adapt to meet the requirements of these populations. At present such flexibility is not found, and most education and other services are provided by civil society organizations and local voluntary efforts. These are inadequate to meet the needs.

4.2 Diversity

Pakistan has multiple layers of diversity: linguistic, socio-economic, demographic, geographic, climatic and cultural (and also rural-urban). Each of these have relevance for education design and delivery mechanisms. Education in early years is best provided in the context of the child. Children in early years learn from the familiar and then move to the non-familiar. Slowly, as they develop strong foundational skills the education delivery design (especially the curriculum) can direct them towards a more common learning set that can help them meet national standards in linguistic proficiency and the overall learning achievement.

Language is at the centre of the child's context, but other influences and environmental conditions also need to be considered. Visuals of early age are different for rural and urban children. Social experiences are not similar. This dissimilarity is not limited to the rural-urban divide but also across rural areas e.g. rural experience in a pastoral village of Balochistan will be different than that of an agrarian setting in Sindh.

Moreover, socio-economic development, weather conditions, terrain, social amenities, degree of development in a locality and means of communications, among others, impact the details of delivery. As seen above poverty is not a phenomenon limited to rural areas, there is rising and poorly attended urban poverty. It is difficult to find and retain qualified teachers in more remote areas, construction and maintenance of buildings has to consider the climatic needs and provision of support and mentoring and supervision is diluted with distance and the quality of transport and communications networks. All of these facts, and others not listed, point towards the need to consider diversity in education design and delivery to improve effectiveness of implementation.

4.3 Climate Change & Resilience

Pakistan is listed among the top ten countries that are, and will continue to be, impacted the most by climate change. In the last decade and a half, the country has seen education disrupted by flash

floods and droughts. In case of floods, schools were closed, even damaged and destroyed and in many cases used as shelters for displaced persons. Education was discontinued for children. School closure was not the only reason for children to miss out on school days. Economic hardships faced by families meant older children had to stay back to support income earning activities. Droughts have meant displacement of entire populations and schooling is a major casualty as families move into unfamiliar places and struggle to earn livelihood in new areas. The day to day toll of smog in urban areas and continued increase in temperatures are other areas that impact health and learning.

Climate change is a reality. The education system has to prepare for its implications to delivery by building schools that can withstand weather events and have school communities that are prepared to deal with disaster to reduce risk of damage. Education also has to be a medium to improve climate knowledge, movement towards green thinking and preparing children for green jobs of the future.

4.4 Financial Situation

Pakistan is passing through, its most difficult economic period. It has yet to recover from the shocks of the pandemic and global inflation continues to suppress its ability to grow in real terms. The revenue numbers have increased but a high debt to GDP ratio divert these funds into debt servicing. Slow economic growth and high debt servicing needs have reduced the fiscal space for expenditure on all developmental work, including, education service delivery.

4.5 Human Resources Situation

UNDP's Human Development Report for 2023-24 ranks Pakistan at 164 out of 193 countries included in the ranking. This is not only an alarming statistic on its own but also becomes an impediment to the speed and expectations of education reforms. Low HRD has maximum implications for education because it requires the highest number of qualified personnel. With the current situation finding quality human resource, especially, teachers will be a challenge in the short to medium term. It will be equally difficult to find quality specialists in other critical areas of education. There has been a decline in the technical capacities in education. This has been filled in by technical support from development partners, but the latter cannot be an alternate to good internal capacity. In fact, many policies introduced by development partners do not sustain in the absence of strong internal support. This has practically led to longer programmes or continuous programmes that try and hold up reforms and even then sustainability remains hard to maintain.



4.6 Global Challenges

While immediate challenges faced by the country are extremely important, one also needs to take account of the global challenges that will sooner or later affect a country and its education system. Policies must take note of at least two such challenges – 1) rise of Artificial Intelligence (AI) and 2) the shifting global order. The prominence of AI since the launch of the ChatGPT in 2022 has ushered in a new era in the technological advancement that we have witnessed so far. The new AI powered software are quite capable of producing excellent texts and digital images that look very similar to human products. These technologies have also given rise to disinformation and hyper-engagement of young children and youth with the digital world. With this changing technological landscape, it is important to take note of its implications for education sector. How

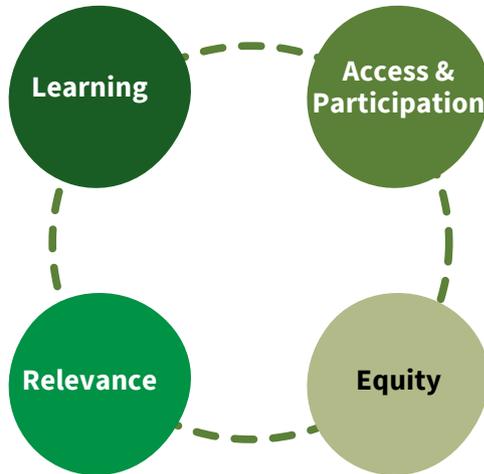
to ensure learning of current and future children to live alongside AI? How to adapt teaching, learning and assessment systems in the world of AI? What will be the jobs for which we have to prepare our young ones in next 10-15 years? These and some other concerns emanating from it should be thought through now.

The other shift in the global space is the changing global order. The hope of a single-globalised world seems distant now. There are more conflicts inside and across nations triggering regionalisation and intolerance. The global organisations are becoming less and less relevant in dealing with local challenges. These may have direct and indirect bearings on our education system too.



5. EDUCATIONAL CHALLENGES

The education challenge, already summarised above, can be broken into four different sub-heads:



When education reforms received a new impetus in the early years of this century, there was a misplaced understanding that access can be prioritised over learning. Pakistan, and the world, have since learnt that the learning challenge drags down all achievements in access. Policies cannot sequence the four areas. All have to be addressed simultaneously with learning as the most central component to ensure irreversible progress.

5.1 The Learning Challenge

The first national diagnostic assessment in Pakistan was conducted by the Ministry of Education in 2004. The National Education Assessment System (NEAS) highlighted alarmingly low levels of learning. Repeated, periodic, iterations of NEAS and its successors (the most recent being the National Achievement Test 2023), continue to show a nearly flat line of learning. Other assessments like the Annual Status of Education Report (ASER) and exercises conducted by provincial bodies reinforce the findings of poor learning[3]. A recent review by the Planning Commission of Pakistan on various indicators of education across provinces showed that while there are gaps in areas like governance and infrastructure when it comes to learning all provinces share a similar situation: differences exist but are minimal as compared to other areas. The problem has also been repeatedly highlighted in the various provincial education sector plans developed in the last decade and a half.

The most alarming statistic of the learning situation is inability of children to develop foundational literacy and numeracy as late as grade 5. This, probably, causes the high dropout

rate at primary. Many who continue also never attain the reading and writing skills, essential to development of a self-learner, as late as secondary school. The result is a high number of failures in secondary and higher secondary examinations and even complaints of poor quality of reading and writing ability of university graduates.

Where does the problem lie?

Poor learning is an outcome often blamed on the teacher. It is natural to reach this conclusion based on observation of teaching in the classrooms where teachers can be seen as covering syllabi without attempting to improve students' learning. As a result, many interventions in the past have been focused on increasing the quality of the teacher through merit-based recruitments, strong professional development programmes and even rigorous monitoring in some of the provinces. None of these have produced adequate results.

Clearly the singular focus on teacher as the sole cause of poor learning has not worked. The failure probably lies in the inability to view poor teaching to be the result of multiple inputs, including, the teacher.

At the core of the learning challenge is a failure to understand the child, their context and the need to be child centred in policies and processes. All policies focused on learning have to consider the following:

- All inputs matter
- Early years are most important
- The child matters the most

5.2 All Inputs Matter

As mentioned above 'Teaching' in the average classroom in Pakistan is focused on coverage of the syllabus and not learning of the child. Children try to succeed in the system through rote learning as neither the teaching approach nor the examinations systems encourage critical-analytical thinking. Those who can manage this (often with household help) succeed in varying degrees while others drop out.

The teaching process described above cannot be attributed to teacher competence alone. There are other important inputs, which arguably, have a heavier influence on the teaching-learning method than intrinsic teacher competence. These include the curriculum, textbooks, assessment and examinations and the accountability structures.

Policies must review all inputs, including teachers, curriculum, examinations, accountability mechanisms and their combined impact on learning and not be limited to a singular variable for improvement of quality.

[3] The situation of low quality of learning has also been highlighted in a nationwide study conducted by Aga Khan University's Institute of Education Development (AKU-IED); expenditure on all developmental work, including, education service delivery, accessed on 20th November 2024.



5.2.1 Teacher Shortages

All provinces need large numbers of teachers of quality to meet the requirements in schools. There is a shortage of teachers. What exactly does it mean? The easiest answer lies in looking at the number of posts approved and vacant due to non-recruitment. Punjab alone, as per the government’s calculations has a shortage of 160,000 teachers. The definition of shortage also needs to be considered as per the requirements of the curriculum. At the secondary level a student is expected to study 8 subjects, five of which are compulsory. The number of subjects is 8 at middle level also and at the primary level there are 5 (in some cases 6) subjects in grade 1 and these increase to 7 by grade 4. As the level increases the requirement of specialisation increases.

The numbers that demonstrate shortages as per posts hide many details like shortfalls in specific subjects, especially, at the middle, secondary and higher secondary levels. The further disaggregation of shortages, particularly of subject specialists, across schools for boys and girls and rural and urban areas show that in particular girls and children in rural areas have lower access to specialist teachers.

Current calculations of teacher shortages do not accommodate needs for growth as more children enter the system and when dropouts will reduce. Approximately, 600,000 children enter the population every year, but not all join schools when they reach the relevant age.

Calculations used by the provinces to identify teacher shortages use student teacher ratios that are administratively convenient (and these vary for each province) and not the requirements of the curriculum. If the number of subjects and degree of specialisation is fully considered the requirement will increase at all levels and the most at the secondary and higher secondary levels.

At the primary level multigrade teaching is common. In Balochistan nearly 82% primary schools have either one or two teachers. These are inadequate to meet the demands of the curriculum. The requirements in terms of numbers

will increase if policies target reduction, and eventual elimination, of single teacher primary schools even if multigrade teaching is not completely abolished.

5.2.2 Teacher Competence

Quality or competency of teachers is an even more complex area to address. As the largest employment sector, teacher quality, becomes a casualty of poor schooling itself. **Beyond schooling, the quality of pre-service teacher education, recruitment systems and in service professional development are the processes that would add to teacher competency. Each of these areas require a discussion in policy documents.**

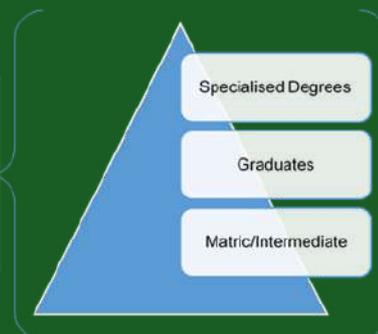
There have been reforms to raise the quality of pre-service teacher education through 4-years B.Ed programmes. These new programmes, where they have been implemented with required pre-requisites, have showed some success. However, they are not sufficient to complete the massive requirements of teachers. Additionally, ensuring reasonable quality at all providers seems a challenge for the National Accreditation Council for Teacher Education (NACTE). Nevertheless, we need to bolster this pre-service system, alongside systems for in-service professional development linked to certificates/degrees. Teaching license can also be a means to improve the availability of quality teachers. Sindh has introduced teaching licensing in 2024 and the results can be seen to enhance this system in other provinces.

Pre-service teacher education has been an especially difficult area. There have been issues raised in the past on the quality of pre-service programs. While the National Council for Teacher Education (NACTE) has been operational since the last fifteen years, the impact of their work on teacher education remains unclear. Equally important the pre-service teacher education systems alone cannot be relied on as the requirements are much greater than the capacity of pre-service institutions to produce graduates.

Quality Versus Quantity in Teacher Recruitment

Education systems require recruitment of teachers in large numbers. The trade-off between the numbers and quality is often an inevitable compromise for underdeveloped systems. The market may not have enough qualified personnel if the level is raised – the higher the requirement the fewer the number available. To get the requisite numbers, higher pays may be needed. These are constrained by limited financial resources. Reduction of requirements of qualifications may make it difficult to implement the curriculum as designed and implement standards of learning expected. While the dilemma is universal it becomes more acute in rural areas and, especially, for girls in areas with large gender disparity in female to male education attainments.

- Other factors:**
- i. Financial Resources
 - ii. Standards
 - iii. Curriculum Needs
 - iv. Pedagogy expected
 - v. Projected growth of students
 - vi. Natural attrition of teaching workforce



Recruitment rules have to consider market availability and system requirements based on the simple principle: **The higher the qualification required the lower the numbers available in the**

Source: Balochistan Education Sector Analysis 2018: PPIU, Department of Education, Government of Balochistan



In the last few years there have been experiments, and reforms, in recruitment and professional development across all provinces. Anecdotal evidence suggests that the competence of teachers recruited through these processes is qualitatively better than the past when political interference in recruitments were high. However, one trend has been a slowing down of recruitments due to lower political interest (in some but not all provinces) which contributes to a continued increase in the gap between demand and supply of teachers. An important cause of shortages is loss of quality teachers to other employment opportunities.

Key Questions:

Policy on teachers need to address the following questions:

1. What should be the requirement of number of teachers for each grade in view of the demands of the curriculum and student teacher ratios?
2. How do provinces plan for teacher recruitment? Are these adequate to meet the requirements? Where are the flaws?
3. How can provinces meet the huge shortfall (even the numbers admitted by each government)?
4. What are the key issues in teacher competency?
5. What are the causes for competency shortcomings?
6. What are the solutions to improve teacher quality while meeting the demands of scale?

5.2.3 Teacher Welfare and Inclusion

Teachers are employees of the departments of education and not, as often perceived, independent actors. This means that their welfare and inclusion in decision making is the responsibility of the employer. There are no systems to assess distress factors of teachers, especially but not limited to, the mental toll of teaching multigrade classroom and adolescents and a curriculum not suited to the endowments of the children (discussed in more detail below). Teachers are also, often, assigned duties beyond their terms of reference. This also impacts the teaching and learning process. Teachers' inclusion in policies for their welfare and education in general is minimal. This has multiple implications for the overall wellness of teachers and consequently, learning in the classroom.

Key Questions:

Policy on teachers also need to address the following questions:

1. What are the main welfare issues faced by teachers? Has there been any assessment?
2. What are systems available to teachers for redressal of grievances?
3. Do teachers need counselling support? If yes, is there any system in place?
4. Why is teacher inclusion limited in policy, curriculum and textbooks development?
5. How can teacher inclusion in the above processes be enhanced?
6. How can welfare concerns (including mental stress and health issues) of teachers be addressed?

5.2.4 Curriculum

Curriculum prescribes the learning path, and process, over the entire school period. Ideally, they should adjust as per the stages of development and learning contexts of children. The latter, especially, is vital in early years of education. Children learn along a path. If they cannot fully learn the curriculum of the lower classes they cannot learn in the higher levels. The learning gap continues to grow and is considered irredeemable through business as usual, especially, after year 2. Once a child falls behind it is very difficult, if not impossible, for teachers to remedy the situation.

Curricula are the least researched component of the education value chain in Pakistan, despite being the most important contributors to the teaching learning process in the classroom. Once developed, these are seen as immutable documents. Multiple problems were identified in the curricula by the specialists consulted.

Curricula are overcrowded, ambitious and rigid.

They do not accommodate the context of the child which violates a fundamental principle of curriculum development. This impacts the early learning years the most, as children arrive from different backgrounds and endowments, especially, language development. A rigid curriculum will exclude all children whose natural, home based endowments, do not fall within the assumptions on which the learning process has been designed. These children begin to lag very early in the education process.

There is an elite bias in all subjects. Children are expected to begin learning all four skills of English language (listening, speaking, reading and writing) from grade 1 with rapid advancement over the next three years. One of the SLO for Grade 3 English reads as follows:



“Write opinion pieces in which they introduce the topic or name the book they are writing about, state an opinion, supply a reason for the opinion, and provide some sense of closure.”

The above expectation does not consider the language endowments of the child, teacher capacity, the overall load of the curriculum and home support available. A detailed note on language policy has been added below to elaborate this critical issue.

Unrealistic difficulty level is not limited to English. In Mathematics the topics required to be covered in grade 1 are:

1. Numbers and Operations
2. Algebra
3. Measurement
4. Geometry
5. Statistics and Probability

Advanced school systems in jurisdictions with strong home support may be able to cover the above topics in Years 1 to 3 but not the average government school or low-cost private schools in developing countries. In Pakistan, given the basic endowments of teachers, parents and students it is difficult to see these being effectively taught in classrooms. In fact, these have the potential to impede learning. The only exception may be the elite private schools where the above conditions are probably fulfilled. The two systems cannot begin at the same point.

In a country where children struggle with foundational numeracy, the value addition of topics like geometry, algebra and statistics and probability is difficult to comprehend. Increased difficulty levels in early years, given the context of a child, are counterproductive to the learning process. They only add to the cognitive load.

The unrealistic expectations of the curriculum contribute to weak learning outcomes and as a result, in post primary classes teachers mostly focus on children who have learnt and can continue to cope with the requirements of the curriculum at the given level. All other children are assumed as ‘unteachable’.

Given the diversity in Pakistan, curricula need to have options of alternate paths. These are critical in early years. The paths can begin to converge in middle school, and by secondary, all children can learn at the minimum standards prescribed. Rigid curricula are counterproductive to learning. The effort to introduce uniformity from year 1 disrupt possibilities of reaching equity and equality in learning.

Key Questions

Policies should cover curricula and methods of their review to ensure that they are aligned to learning needs and context of children. Key questions to be asked are:

1. Do curricula meet the learning requirements of children with different language and home endowments?
2. Have reviewers based their approach on research of the local context?
3. Do provinces have an ongoing process to review implementation of the curriculum in classrooms?
4. What should be the standards for review of curriculum? Do any exist at present? If yes, do they meet the requirement of education in Pakistan (or the relevant province)?

Language in School Education

The multilingual nature of society in Pakistan adds to the complexity of curriculum preparation. The language policy in school instruction faces the challenge of helping the child acquire literacy and develop proficiency in more than one language. A balance has not been reached between the national policy (and aspirations) on languages and the natural language endowments of children that should be harnessed for literacy development. Language expectations in curricula, and the textbooks, are built on assumptions about the child’s language endowments which may not hold true for a large percentage of children.

Pakistan’s national language policy is not compiled in a single document. It can be constructed through a review of the Constitution, the national curriculum and more recently a decision of the Honourable Supreme Court of Pakistan.

The national policy on language, specifically enshrined in the Constitution, gives Urdu the status of our “National Language”. It has, since independence, also attained the status of the lingua franca for communication across the country.

English as a medium for social mobility has to be learnt by children to eliminate the current inequities as greater opportunities are available for children with high proficiency in the language.

The demand for learning of Arabic as the language of the Holy Quran, and other important sources of Islamic scholarship, has also increased in recent years. Arabic is one of the languages included in the national curriculum.



Finally, the issue of the mother tongue. The Constitution, under Article 251(3), recognises the mother tongue and allows provinces to 'prescribe by law' the use and teaching of provincial languages in addition to the national language. The above mix poses a difficult problem for education policy makers.

How can the policy aspirations be converted into an education design (or curriculum) that helps the child become a self-learner and also develop the requisite proficiencies in each of the above languages?

Education research has established the following principles on language and literacy acquisition.

1. Language consists of four skills listening, speaking, reading and writing. The first two are also referred to as 'oracy' and the latter two as 'literacy'. The first principle recognised by all research is the literacy is built on proficient oracy. This is why the mother tongue learnt by the child at home is recognised as the best medium for literacy acquisition in early years of education.
2. Literacy is recognition of the print concept, which does not come as naturally, as oral language learning that a child acquires from the environment as a social need.
 - Literacy requires recognition of letters and their connection with sounds. Modern letters are abstract shapes as there is no correlation between the symbols that represent the sounds of a language. Transition from oracy to literacy is a complex process for any school system.
 - It is the ability to connect letters to form words, string words to create sentences, collect sentences to form a paragraph and develop a story or a narrative with the help of paragraphs.
3. Languages should be taught as skills and cannot have the same treatment as other subjects. Skills (unlike concepts) require longer periods, and repetitions to acquire fundamentals before moving to complex usages. Language is not an exception.
4. A child who enters school has a reasonable mastery over oracy of at least one language. If curricula do not recognise the availability of this skill platform to develop literacy then they will either need much longer periods to help children first develop oracy in a new language and subsequently shift to literacy or place pressure on the child of learning a skill for which no platform exists in his or her repertoire. The consequence of the latter are that the child does not learn the targeted language, develops a fear of learning, loses on cognitive development due to the pressure and often drops out of school. This is the reason that research advocates use of mother tongue for literacy development.
5. Research also informs that the better a child develops the four skills in one language, the more easily can they transfer it to another.

While research supports the above approach, certain myths about language learning confound the debate in Pakistan. The first issue raised is that children can learn multiple languages simultaneously. This is true if these languages are spoken in the environment of the child and the process pertains primarily to oral language learning. Children, in early years when they have just begun schooling, cannot learn new languages in the pressure situation of classrooms. More importantly, literacy acquisition in an unfamiliar language is almost impossible. The second myth on language learning is that early introduction allows better learning. Again, there is a difference between learning from the social environment and in a school. Early introduction of an unfamiliar language in a school can actually be counterproductive to learning i.e. literacy development and long term success in schools. Children who have acquired strong literacy and oracy skills in one language can learn another language well even in a shorter time period. The only difference will be that the child who was introduced to a language early, primarily due to social circumstances, will be able to pronounce words better and have a more 'acceptable' accent. Both these factors have no impact on long term academic success. (See Annex I for a possible approach to sequencing of languages introduced for learning in schools).

Promotion of Regional Languages

The use of mother tongues for early literacy acquisition is based on education research. Inclusion of multiple local languages, even beyond the mother tongue argument for early learning, is imperative for promotion of the multiple languages in Pakistan. Depending on the decisions of individual provinces and regions, it will be useful to include regional languages as compulsory subjects through middle schooling and as elective ones in secondary and higher secondary levels (this option already exists in case of many languages but needs review for scope, encouragement of electing them as a subject and ensuring implementation arrangements).

Key Questions

The situation described does not exhaust all arguments on the language debate but summarise the key issues. The situation leaves the curriculum developer with a set of dilemmas:

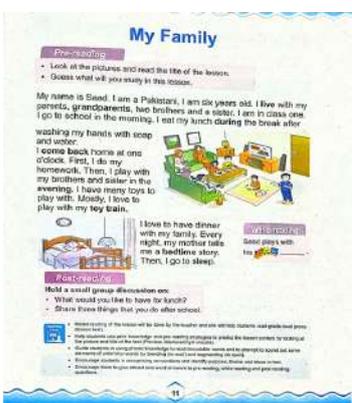
1. How does the curriculum cater to the learning needs of the child in early years and balance it with the need of national aspirations and socio-economic needs of other languages?
2. What should be the right sequence?
3. How will resources be realigned for a different language formula?
4. How to influence the social mindset on languages that has ossified into an elitist bias on the methods for language learning (as a continuity of the colonial mindset)?



5.2.5 Textbooks

Textbooks are the highest value, mostly the learning material available to the teacher and the child. Textbook quality has never been assessed from a learners, and learning perspective: the linguistic appropriateness, contextual alignment, illustrations examples etc. An example is the illustration on the right, from Grade 1 English textbook at the federal level, show an elitist bias to which many rural and urban poor cannot relate. Books from provinces are also replete with such non contextual representations.

While textbooks are essentially products of curricula, poor authorship and review processes can add to the negative impact on weak learning beyond the limitations of the curriculum. Although review processes are used, these are normally dominated by



hierarchy (for example the university professor in the group) at the cost of the more relevant opinions of the practising teachers. In all provinces textbooks are prepared by textbook boards through private publishers. There is no method available, or used, for testing for age appropriate vocabulary, learner friendliness and even horizontal and vertical alignments. There is a need to prioritise the importance of textbooks in education processes, review their quality objectively and revise the methods through which these are prepared.

Key Questions

Key Questions for policy are:

1. Are textbook standards defined from a child centred perspective?
2. Are the current standards of textbooks robust enough to produce quality textbooks?
3. Are textbooks field tested before approval and introduction in schools?
4. Are children's vocabulary limitations assessed prior to their joining schools?
5. Is there a process of ongoing review of textbook based on teacher and parental feedback available? Is it organised into a regular process? If yes, what are the outcomes?

5.2.6 Assessment and Examinations

Weaknesses in examinations, especially classroom based assessments, cannot be delinked from the issues of curriculum as discussed above. However, these need review and improvements irrespective of the problems caused by ambitious and rigid curricula.

Assessments have multiple purposes: improvement of the teaching learning process

, testing student knowledge, assessing systemic weaknesses etc. Pakistan have all types available in the system. The problem lies in the quality and effectiveness of these examinations in improvement of learning.

Internal assessments in schools (formative and summative) are important components of the teaching and learning processes. Over the years, various sector analysis of provinces have highlighted these as a weak link. Teacher capacity to develop formative assessments is poor. All examinations, including those conducted by boards of examinations, test rote memory and consequently drive the teaching processes in the same direction. Use of examinations to improve teaching and learning, whether at the micro level in the classroom or systemic level is nearly non-existent.

Professional development exercises have been conducted in all provinces to improve formative assessments. Reforms of examinations held by boards of examinations have been more piecemeal and the lack of standardisation across boards and quality of examinations continue to be a concern. Marks obtained in the examinations do not necessarily reflect the ability of the child to perform in higher education, especially, where children of different boards are compared.

To reduce the differences in standards across boards, an additional layer of testing, the 'entrance tests' is carried out by higher educational institutions. There have been allegations of serious irregularities at the conduct, validity and reliability of these entrance tests, particularly for high-priced fields like medicine and engineering. These need more focus and review.

Overall, standardisation of the quality of examinations across the various boards of examinations continues to be raised at policy levels. The answers have remained elusive despite improvements brought in through the efforts of the Inter Board Coordination Commission (IBCC). IBCC also has the role of providing equivalence scores to children who appear in international examinations. There has been ongoing review of the process but there are still complaints about the system. This is a challenging area as IBCC deals with over 1000 certifications of 130 countries, in addition to providing the same services for internal qualifications like those for the madrassas. There will always be an ongoing need to review and improve the equity of the system. Some important policy decisions will be needed, especially, in the case of international examinations syndicates that, apparently, play to the market and have differentiated requirements for home and overseas students.



Mission Statement of IBCC

To bring utmost perfection through coordination among the member Educational Boards for uniformity in evaluation / assessment standards up-to Higher Secondary level including educational documents thereof.

Key Questions

At the policy level, both, practice and use of examinations need to be reviewed for improvement. Key questions are:

1. Do schools regularly conduct formative and summative assessments? If yes, how are they utilised to improve the teaching process?
2. Has the quality of internal assessments and examinations in schools been assessed? If yes, what are the findings?
3. Are paper development and review processes in Boards standardised to test children as per the curriculum? Or are validity and reliability of papers tested?
4. How do boards select paper setters and examiners?
5. Are paper developers and examiners trained on fundamentals of assessments?
6. How can examinations across various boards be standardised?
7. What are the current issues in equivalence provision of international examinations? What are the possible reforms to improve the situation further?
8. What are the key reforms required?

5.2.7 Supervision and Support to Quality

Teaching processes need supervision and support. In stronger systems heads of schools have this vital role of academic supervision. Most of the primary schools do not have head teachers. The only exceptions are sections of primary included in a middle or a high or a higher secondary school. Many primary schools consist of single teachers. This increases the importance of district and tehsil level education officers. They are in routine, more involved in administrative issues, and not academic support or supervision. Specific interventions have been introduced in some provinces but again the impact (and adequacy) of these experiences remain unclear. In general, supervision expects coverage of syllabi and supervisors have neither the capacity nor the time to assess learning and support teachers in improving classroom teaching and learning. As long as supervision expects syllabus coverage, learning will not be focused.

5.3 Early Years Are the Most Important

No province has succeeded in developing quality early childhood education programmes on a scale. Pre-primary ECE is an essential intervention to lay the basis for quality learning and, equally importantly, minimise the learning disadvantage of children based on households and socio-economic conditions. It prepares all children for school at a comparable level, if not equally.

Policy intervention in early years need to follow the relevant targets of Sustainable Development Goals (SDG), specifically target 4.2 and its indicators given below.

Target 4.2

By 2030, ensure that all girls and boys have access to quality early childhood development, care and pre-primary education so that they are ready for primary education

Indicators

Indicator: 4.2.1
Proportion of children aged 24–59 months who are developmentally on track in health, learning and psychosocial well-being, by sex

Indicator: 4.2.2

Participation rate in organized learning (one year before the official primary entry age), by sex

ECE requires quality teachers, a curriculum within the context of the child and space. There have been issues in all three. The policy needs to find and address the reasons for all three problems. One part of the reasons is low resource allocation to ECE. The question of continuity and connectivity between pre-primary and primary ECE is also not clear. There is a need for a detailed situation analysis of child development in pre-school years and organized pre-primary learning, followed by a set of implementable policies that are timebound. As we plan for the incoming generation of children ECE, and early childhood development (ECD) need to be prioritised as important starting points.

The pre-primary ECE should transfer into an effective primary ECE (starting with a one year intervention as required in the SDGs) where children's foundational literacy and numeracy should be the main focus, and curricular load should be assessed with achievement of these foundational skills as the central objectives. One of the concerns has been procurement of human and financial resources. Under the circumstances the more practical approach calls for planning a one year pre-primary education programme. Any transition can come much later.

Key Questions

Key questions for policy are:

1. Why have education systems failed to scale up quality ECE?
2. What are the key impediments?
3. What is the best way forward to scale up quality ECE?

5.4 The Child Matters the Most

The child has been the most invisible input when considering education policies, especially, those targeted at learning. **Children do not enter the classroom equally prepared and healthy. About 40% children in Pakistan become irreversibly stunted by age 2 (UNICEF, 2019).** It means among other issues, the ceiling of their cognitive development will always be low and an additional challenge for inclusion in mainstream education. The country also has high levels of infant and child mortality rates and disease prevalence. These have an influence on the child's ability to perform in the classroom. Poverty and nutrition issues are not accounted for in education policies. Many children arrive in the classroom without food. It means even if the curriculum was properly designed and teacher of high quality available many children would not be in a position to learn even before they enter the classroom. Stunting, disease and poor nutrition all contribute. **A realistic and effective education policy cannot be developed without a study of the situation of the child and a consequent multidisciplinary approach to address the issues. Without the child prepared for learning the education effort will result in low value addition.**

5.5 Digital Skills a Must

Digital skills have attained a status equivalent to literacy in the modern world. No individual, education system and country can progress without digital skills. Computer availability has increased to an extent in schools and the pandemic enhanced digital skills for many teachers and students. These may not be adequate. **There is a need to review digital skills, develop benchmarks for each education level, assess the current situation and develop a resourced plan for its enhancements. In fact, digital skills should be used as one of the markers in all learning data.**





6. OUT OF SCHOOL CHILDREN (OOSC) & ACCESS

The trigger for declaration of the emergency has been the 26 million out of school children. These include children who never join schools and others who dropout after joining education. The problem is ongoing and cannot be simply seen as a return of these 26 million back into education processes. Any sustainable solution will require assessment and redress of all causes that lead children to either not join or dropout. Till these problems have been addressed permanently the problem will continue. However, the children who dropout remain the responsibility of the state. They need to be brought back into the education process. The option of non-formal education as a second chance opportunity to return children to schools or education will require a high policy priority to achieve this objective. At present, despite increased focus, the sector remains on the outer margins of policy priorities.

Therefore, the access and participation policy approach, needs to be two pronged: eliminate causes of dropout and provide second chance education through relevant non-formal education.

6.1 Addressing Causes of Dropouts

As mentioned earlier, one part of enhancement of access is through improvement of quality of learning. There are other important areas to address as well, mostly on the supply side.

Table 1: Share of Each Level of Schools

Level	Punjab	Sindh	KP	Balochistan	AJ&K	GB	ICT	Pakistan
Primary	68.86%	89.07%	79.70%	80.47%	67.10%	65.81%	48.21%	77.73%
Middle	13.53%	5.94%	10.07%	10.61%	16.68%	17.28%	15.05%	10.60%
High	15.12%	3.90%	7.89%	7.58%	12.80%	14.15%	26.02%	9.65%
Higher Sec	1.46%	1.01%	2.35%	0.96%	1.91%	1.78%	10.71%	1.54%
Inter Colleges	1.02%	0.08%	0.00%	0.38%	1.52%	0.98%	0.00%	0.49%

Non-availability of schools or in some cases a functional school means children do not have opportunities to join any institution even if the parents desire for them to be educated. While there has been an increase in demand for education, in many places, cultural reasons still hold for children being out of school. This would apply, in many cases, to the female child. There has been an increased trend of female education in the entire country, but large pockets of cultural resistance still exist. Part of the resistance comes from genuine safety concerns where girls may be vulnerable to risks when travelling to schools.

Access to school and expansion of schooling opportunities continue to be within the limited, traditional, set of primary, middle and secondary. In the public sector the primary to middle bottleneck also reduces the ability of children to progress in schools.

Table 1 below shows the ratio of primary to middle schools in all provinces. Number of primary schools is a multiple of middle with the worst ratio in Sindh where only 5.9 percent of the total schools are at the middle level as against 89% primary. Even if it is assumed that high schools include middle levels, the gap remains wide. Higher secondary schools and inter-colleges forming classes 11 and 12 have the lowest share.

In addition to the bottleneck discussed above the methods to identify schooling needs have to be based on data and technical feasibility.

The current system of school development and establishment (with variations within provinces) is not based on a mapping of needs and projections for the future. There is a need to conduct a study to identify parts of the country where children, even today, do not have access to any school in their geographical location.

Policies cannot be limited to increase in schooling opportunities and expansion of non-formal education. Children who fall behind are at risk of dropping out. What interventions can be developed to help children who are in school and

at risk of dropping out? The recent emphasis on remedial learning show increased focus on the need to support children who lag in learning. If effective, these remedial options can reduce dropouts.

Remedial learnings are not possible in school routines. At the primary level, teachers are already overloaded with on overcrowded curriculum and multigrade teaching. In middle and secondary levels, the requirements of the curriculum rise along a steeper curve and teachers do not have time to remedy learning losses inherited from lower classes. As mentioned above, in recent years some provinces have introduced remedial learning options for foundational learning through Teach at the Right Level Approach (TaRL). Supported by development partners these programmes target foundational learning.



There is a need to study the success and scalability of remedial programmes and specialised remedial learning has to be designed for post primary levels also. This will reduce the chances of dropouts and more meaningful learning.

The set of exact causes for children not being in school will vary according to the local context but the above correlation of quality of learning and dropouts will be valid for most with varying degrees. School availability and the primary to middle bottleneck also continue to impact access. An important aspect, often, lost in the discussion on participation is student absenteeism. There are high levels of absenteeism, again related to various reasons.

However, policies need to identify the causes for dropouts and absenteeism and develop responses according to the situation in each province and regions within them. The better education delivery can identify and address these issues, the more effective will be the policy options to change the state of affairs. Among others there is a need to develop database systems to take advantage of new technologies to track children throughout their schooling age. If the systems do not know who is out of school and why, they cannot provide appropriate solutions – formal and informal.



Key Policy Questions

1. What are the main causes of children dropping out of school? To what extent are the following responsible and how:
 - Lack of schooling options
 - Lack of teachers
 - Dysfunctional schools
 - Low quality of learning
 - Demand side obstacles
2. What strategies have been adopted to reduce dropouts? Which ones have been more successful? Why have other options failed?
3. Do schools have systems of identifying children at risk of dropping out? If yes, what are the policy options available to address these risks?
4. What are most optimal policy options to remedy supply side problems in stemming school dropouts and inclusion of more children in education? (specifically, the removal of the primary to middle bottleneck).
5. What gender specific issues need to be addressed for both demand and supply side? (also relevant to section 7.2)

6.2 Girls' Education

Female Inclusion is an important area of policy concern in Pakistan. While some provinces have performed better than others, and there are individual districts where female participation exceeds that of male. Overall girls lack education opportunities as compared to boys. Increased female inclusion in education requires more interventions. The issue of gender equity is important for social development and districts with higher female participation than boys cannot be seen as success stories but as areas where balance has to be redressed through increased continued inclusion of males while improving overall participation for both males and females. Even with the apparent success stories details reveal that female schools often lack specialist teachers in sciences and mathematics, which reduces their career choices.

Female inclusion is not limited to school enrollment. There are additional specific issues that need to be considered for female children. Awareness and provision of facilities on menstrual health and hygiene are critical. Only small project based interventions have been made. Nothing on scale. Anecdotal evidence suggests that lack of awareness in the households on MHH leads to high absenteeism of the female child. Other issues include safety in travel to school.

There is a need to collate issues specific to the girl child's welfare, in addition to those mentioned above and then prepare a policy response accordingly.



Key Policy Questions

1. What are the key gender related issues in the province? What are the issues in each district with reference to:
 - Enrolments
 - Continued education
 - Absenteeism
 - Career choice
 - Welfare and safety
 - Any other
2. What are the current strategies employed to redress the above? What are the key gaps?
3. What are the causes for the above issues?

6.3 Inclusive Education and Children with Special Needs

Children with special needs are the most excluded from education. Options of special schools are few and the efforts for inclusive education have not been successful beyond a few that can be showcased. Preparation for inclusion requires training of teachers on identification of functional



and low to moderate disabilities. Children who can be included in mainstream schools though some may require additional support for learning and psycho-social disabilities. Beyond this bandwidth special schools are needed.

Special and inclusive education has not been organised in a systemic approach. Data is lacking, needs identification on scale has never been undertaken of human resource capacity within and outside the government sectors. Governance models also differ for each province with some having a separate department. Ideally, it should be part of the main education department with support functions at the decentralised levels.

Like many other areas special and inclusive education requires a multi-sectoral approach. Given the complexity of the types of disabilities specialist diagnosis and interventions are necessary. Intuitively, there will be lack of such specialists beyond the developed urban areas. Even the numbers may be inadequate to meet the requirements. Policies on special and inclusive education may require an even more deliberate assessment, and growth expectation, than routine education. It is important to prioritise it at the earliest for the process to grow at a faster rate.



Key Policy Questions

1. Does the province have disaggregated data on children with special needs? (disaggregation means according to gender, geographic location and disability type)
2. If no, to the above then does the province have the capacity to collect and include the above data?
3. Does the province have an inclusive education policy? If yes, what have been the key reasons for inability to develop scaled up for implementation? How can these problems be rectified?
4. Are there linkages with the health systems and other relevant professionals to support children with special needs (on a scale)? If no, what are the reasons for the lack of linkages? If yes, what are the shortcomings in the process? How can this area be strengthened?

6.4 Child Welfare in Schools

Child welfare in schools has received low attention. Corporal punishment has been banned in a number of provinces and in Islamabad Capital Territory Children (ICT). Despite the ban, anecdotal evidence clearly suggests continuation of the practice. Measures for better implementation of statutes and policy options beyond law will also need to be explored. These may include social

awareness and extension of law to households as the acceptance for the practice is widespread. Bullying is another unattended area.

Children at school are at high risk of sexual abuse. The data collected every year by 'Sahil' exposes the vulnerability of children in school premises. A more recent awareness, needed for schools and households, is protection of children in the cyber space. There are no systems in schools to help with child, teacher and parental awareness and development of consequent safeguards. With widespread use of internet and unchecked accessibility this is a high risk area requiring increased focus and policy response.

The counselling services is an important component, for management of the above situations and other issues that impact a child's mental well-being. These are currently, nearly absent for both students and teachers.

Finally, regular health check-ups are extremely important. These are provided in limited jurisdictions based on initiative of local leadership. Some of the good initiatives in the past have receded into disuse. Health check-ups and support on a scale need to be considered by education policies.

All of the above require a multisectoral approach that would include, the Department of Health, Social Welfare and even in some cases the Police. The understanding of each of these (and others identified) in dealing with school children and issues also needs to be improved.



Key Policy Questions

1. Are there any markers of child welfare in the education system? If yes, what are these?
2. What is the current situation on bullying and corporal punishment? What are the causes for continued incidence? What are the best ways to eradicate them?
3. Are systems cognizant of incidents of child abuse in school? Have any policies and safeguards been developed? If yes, what has been the impact? If the impact has been low then what are the causes?
4. Are systems cognizant of incidents of cyber abuse vulnerability of children? Have any policies and safeguards been developed? If yes, what has been the impact? If the impact has been low then what are the causes?
5. Are counselling services available? If no, what are the obstacle?
6. Does the school system have linkages with other critical organizations to help with child protection and overall child welfare?



7. LITERACY & NON-FORMAL EDUCATION (NFE)

A challenge of 26 million out of school children cannot be met with formal schooling alone. The number constitutes 36% of the total children of this age cohort. It is important to note that 60% of OOSC in Pakistan are between the ages of 10 and 16, which is the largest cohort and requires attention[4]. It has also been observed that this age cohort is quite complex, and it is somehow difficult to bring them back to schools as most of them are overage, involved in some work, have learning challenges or are slow learners and remain excluded of the education/ school system for other reasons. Therefore, the OOSC continue to pose a serious challenge for education policy makers and practitioners.

At the same time, illiteracy in Pakistan has been among the consistent threats that continue to negatively impact the human development and human capital indicators. According to Pakistan Housing & Population Census 2023, literacy rate of 10 years and older population in Pakistan is 60.65%. Literacy rate of women is 52.8% as compared to 68% for men, while literacy rate of rural women in Pakistan is 41.7%, while the same (rural women) in Balochistan are only 26.6% literate, lowest in the country. Data also narrate number of illiterate populations, which is 67.56 million.

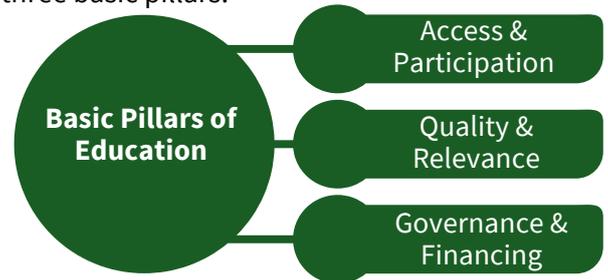
Literacy and Non-formal education have received increased recognition over the last few years, but policies need to prioritise NFE further and build on existing work and models. NFE as a learning system includes all the components of formal education: quality, relevance, participation and equity. It also requires a robust governance system. Policy makers will need to recognise that the complexity and difficulty factor of NFE is greater than formal education due to the nature of the classrooms where children of different ages and varying life and learning experiences sit together. Teaching, curriculum and material development and assessments all pose their own specific challenges. Data collection of out of school children, especially, at the local level is an important challenge. Other issues include resource implications that drive the delivery approach, systemic capacity and ensuring meaningful outcomes for students in NFE.

Key problems, challenges in NFE in Pakistan (to be narrated under three main pillars of 1) access and participation, 2) quality and relevance and 3) governance & financing. The policy issues/ challenges include issues in NFE service delivery, supply side limitations, access and equity issues, cultural barriers for girls in particular, relevance, quality issues owing particularly to low teacher

qualification, bottlenecks in implementation/ delivery, system related weak areas and low financing along with low level of political will. Such challenges have been exacerbated by COVID-19 and floods that hit the country during year 2022-23.

7.1 Issues & Challenges

Policy challenges and issues are described below in three basic pillars:



7.1.1 Access & Participation

Following are some major policy issues that restrict accessibility:

1. The largest cohort of OOSC is between the ages of 10 and 16 years that constitute 60% of the total OOSC. This age cohort includes a complex range of children who have difficulty in continuing their education in formal setting as most of them have become overage, involved in labour, have learning difficulties, and belong to low socio-economic strata owing to be in ethnic and religious minorities.
2. Girls, being more in the out-of-school children's cohort require focused attention for inclusion in an educational setting that provides easy and safe access. Among others, cultural barriers, long distances and safety and security issues cause the girls to remain out of schools.
3. It has been noted that majority of the girls who have completed primary education find it difficult to participate in post primary education programmes owing to limited options of elementary/ middle and secondary schools, which are generally not available in all the villages and areas. In such situations, NFBE can provide post primary learning models for girls at their doorsteps as a useful strategy to address the OOSC crises.
4. In addition to girls, a large number of boys do not continue their learning beyond the primary level because they cannot find any economic relevance in post primary education. Therefore, Accelerated Learning Programme (ALP) offering a blend with vocational skill course can generate interest among the those who have completed primary cycle or have equivalent competence. Such programmes should also be delivered through digital, hybrid and distance learning modes.

[4] Data source: Pakistan population and housing census 2023



5. Literacy rate in Pakistan is already low, however, literacy rates for rural women are extremely low especially in Balochistan and Sindh. Therefore, literacy programmes focusing rural women will strategically address the low-literacy issue. In addition, innovative and skill integrated literacy programmes for youth and adults will attract population. Legislation to uplift literacy through various options will also be fruitful.
6. NFE data has revealed that enrolment in literacy programmes is extremely low. Reasons illustrate that unattractive, irrelevant, and rigid adult literacy programmes with very less connections with economic gains tend to create disinterest among the youth and adults. Therefore, the youth/ adult literacy programmes should offer a good range and ideally offer a blend of literacy and skill programmes to increase buy-in of the target population.
7. It has also been observed that supply of NFE programmes has remained significantly low as compared to the demand that keep growing every year and remains proportionate to the population growth rate. Therefore, the NFE programmes must be designed, offered and expanded wisely and be compatible with the growing population needs.

7.1.2 Quality & Relevance

Policy issues of quality and relevance are given under:

1. Though standards based NFE programmes have been initiated, yet it is highly demanded that all NFE programmes should follow standards that should be translated equally at all levels of NFE programming including curricula, learning materials, training and assessment systems.
2. A few provinces have started developing integrated curricula and learning materials for NFE programmes, yet many NFE programmes are still following the conventional formal education curricula that somehow doesn't fulfil the learning needs of the complex and diverse group of OOSC. In order to strategically address the OOSC issues, and illiteracy crises, the NFE programmes should be research based and offer an integrated curriculum that is equivalent, flexible and fast track/ accelerated and suits to the needs of the OOSC and illiterate youth and adults.
3. ICT/ tech-based learning models have limited scale, which should be promoted.
4. Professional capacity of teachers has remained a neglected area in NFE. Standards and curricula based, well designed teachers' training programmes, followed by a structured follow up and continuing professional development (CPD) mechanism is highly needed.
5. Limited options for NFE teachers to join digital learning systems for professional development continue to cause quality issues in NFE.

6. Assessment & Examination in NFE is a much needed area that all provinces and areas must address. Based on the equivalent, flexible and accelerated curricula/ learning materials, literacy & NFE directorates and departments should build adequate capacity to operationalize a well-structured assessment & examination system jointly with respective assessment authorities.
7. Certification regime and recognition of prior learning in NFE has been one of the key areas that need to be designed and implemented. Certification system should not only cover the conventional certification for learning continuity but also involve the recognition of prior learning of the target population.
8. Professional capacity of NFE staff has never been on the agenda of the NFE directorates/ departments and that is why the NFE, as sector of education, has confronted limited attention of the decision makers and the political governments.
9. Lack of innovative, age appropriate, equivalent and accelerated programming in NFE is one of the key reasons for low sector growth. Based on the complexity and diversity of the target population that is OOSC and illiterate youth/ adults, the NFE needs to invest wisely on research and innovation to be able to offer a wide range of NFE programmes that have the ability to address learning needs of children, youth and adults.
10. Education and non-formal education programmes have relatively weak linkages with economic outputs, that is why, a big chunk of population with low socio-economic profiles finds the education programmes less useful

7.1.3 Governance & Financing

Major policy issues that comes under the governance & financing pillar are given under:

1. Inadequate funding for NFE has been the central problem that restricted growth of NFE as a major sub-sector of education. Less than one percent of the total education funds were being supplied to NFE, which needs to be substantially increased to address the OOSC and illiteracy issues.
2. Although NFE directorates/ departments have witnessed some developments in institutional strengthening, yet NFE institutional structures need restructuring with relevant positions, adequate staffing and creation of functional organizational layout.
3. It has been found that functional capacity of the NFE directorates/ organizations has remained weak in past owing to scarcity of funds and lack of functional staff capacity. This situation has generated a need to induct staff in NFE with relevant capacity and continue to build their capacity regularly.
4. Limited capacity of NFE directorates/ departments to design and offer distance learning, tech-based and hybrid learning models for expansion of NFE.



5. Data management in NFE has been experiencing positive developments in past few years in the form of a functional NFEMIS in provinces and at national level; however, these NFEMIS hubs should be consistently strengthened and integrated with provincial and national EMIS for the purpose of joint data management and reporting.
6. Data driven management of NFE programmes is somehow limited in NFE. Very few NFE providers are using data to plan and implement their NFE programmes.
7. Local governance phenomenon is critical in NFE as it provides a system to purposefully engage local communities to enhance ownership and sustainability. So far, community participation in NFE programmes has remained weak.
8. Coordination platforms for NFE actors/providers and Public Private Partnership (PPP) in NFE is an area that needs urgent and policy level attention. Provincial and district level NFE platforms, which have already been constituted, need to be strengthened to serve as genuine coordination platforms.
9. Coordination with formal and private school system at provincial, district and village/ area level has been found limited. This is an area that needs to be dealt at all levels and a concrete and functional coordination mechanism should be built between the formal and non-formal education systems.
10. Accreditation of NFE providers is virtually missing in NFE, which is not only pave way for quality enhancement, but also help in procuring quality partners for effective implementation/ delivery
11. Lack of research and development is not just because of the funding scarcity, but also because of the limited functional capacity at the directorates of NFE.
12. Innovation, integrating ICT with NFE to make to the programmes more attractive and offer viable distance learning options during emergencies.
13. Linkages of NFE with other educational approaches are slightly less except with digital and vocational skills. However, it is needed to build linkages of NFE with distances learning and technology based options, and special education. In addition, linkages with digital skills and vocational training options should be enhanced and all NFE/ ALP learning models should offer a blended learning with tech and vocational skills.
14. NFE, being a flexible and cost-effective learning model may be integrated with Madaris and Masajids DGRE and Literacy & NFE organizations should build a viable connection

to provide NFE/ ALP for all age groups and for both boys and girls in selected Masajids and Madaris.



Key Policy Questions

1. What is the scale and outreach of the current NFE delivery in the province/area?
2. Which levels are covered in the NFE programme?
3. What are the outcome paths for students in NFE programmes?
4. What are the key challenges in NFE delivery in terms of:
 - a. Resource availability
 - b. Governance
 - c. System capacity
 - d. Data
 - e. Any other?
5. What approaches are needed to create more robust responses to make NFE more effective for reduction of illiteracy and non-formal education in Pakistan?

8. PARALLEL SYSTEMS

Education is increasingly delivered by private schools. The trend started from urban areas and has now penetrated rural areas on a large scale. Madrassas constitute another important set of educational institutions. Both these systems have different roots and approaches and each, within have multiple parallel streams within them.

8.1 Private Schools

There has been an exponential increase in the number of private schools in Pakistan in the last 40 years. It is difficult to typify private schools into a clear set of categories. As the tuition fees increase, so do the household characteristics of children enrolled in the school. At the top of the rung are 'elite' private school institutions. The institutions mostly following an international examination system, have highly automated classrooms and learning systems, internal teacher training mechanism and teachers with a high proficiency in English and subject contents (a majority being products of similar schools). These ingredients do not exhaustively describe the possibilities in an elite private school. Even within this particular categorisation, there are different sub-categories. The common singular feature is that fees are within the reach of a minuscule proportion of the society. Total enrollment in these institutions is estimated to be less than 0.5 percent of the total number of children. Their share reduces even further when placed within the total number of school age children, many of whom are not enrolled.



The bulk of private schools are low cost institutions that charge a few hundred rupees, with classrooms, often, cramped into small buildings. Teachers are normally from the community and do not possess qualifications required by government run schools. These also exist, within the bandwidth of low cost private schools, sub-subsets based on ability of households to afford the fees. No regulation or structured method exists.

Expansion of private schools is often seen to be a result of the faith of parents in the better quality of education when compared to public schools. This does not fully explain the causes. In urban areas growth of private schools were, and continue to be, precipitated by access related challenges. As cities and towns grew the number of government schools remained unchanged. High costs of land, among other problems like poor coherent urban planning, meant that the last government schools established dated from 40 to 50 years ago (in some cases even older). Distances from dwellings increased as the latter sprawled farther from these schools. This added to costs of travel to schools and also increased safety issues of young children (especially girls) expected to commute through the city's roads and streets. It is more convenient for parents to pay a small fees for their children enrolled in the small neighbourhood private school.

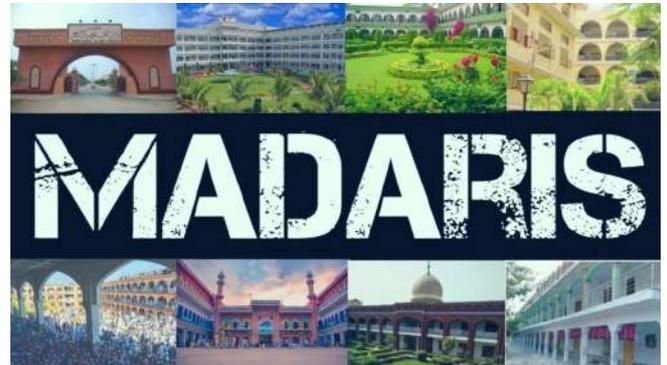


The distinction between the two broad categories above is important as the term private school, as used in common parlance, even among policy makers often blurs the massive difference between the elite and non-elite institutions. More details and policy implications have been discussed in more detail in section 10.9.



8.2 Madrassas

Madrassas were the main institutions for education in the pre-colonial period and prepared the scholars and bureaucrats for the governments, well versed in religious education and temporal subjects. Transformation of the education system through use of the English language, among others, reduced the employability or relevance of the madrassas to the market. While the madrassas of the various schools of thought continued to expand provision of employment to most pass outs of these institutions remained a challenge. In the first ever National Education Conference held in December 1947, the issue was included in the recommendations with the objective of mainstreaming madrassa students. There have been multiple efforts since then with mixed results. Some of the higher education degrees awarded by various madrassas systems are recognised by the Higher Education Commission and options for secondary certification have also been provided but when assessed on a scale, it remains an area of concern for policy.



Recognizing the significance of religious education for Muslims and their mainstreaming our system must ensure that madrassas are included within the formal education framework. This integration should aim for standardization, ensuring that students receive a comprehensive education that combines religious teachings with modern academic disciplines.



8.3 Equity & Parallel Systems

Equity of life opportunities across these multiple parallel education systems has been an important policy debate in Pakistan. The answers are not easy but as already seen in Section, a single rigid curriculum will not provide any solution. On the contrary, disregard for diverse needs exacerbates the gaps. However, irrespective of the scheme of curriculum and learning the capacity of the government to influence and regulate learning in these institutions to enhance the opportunities for children will need to be reviewed. It requires a different approach than the traditional structures of the government apply. In some jurisdictions separate authorities have been set up for regulation of private schools. Their outreach and effectiveness need to be assessed.



Key Policy Questions are:

1. Does the province have data and a system to periodically collect data on all education institutions? If not, what are the key challenges? If yes, what are the gaps left?
2. What are the regulatory challenges to improve quality and relevance of various education streams? What have been the lessons learnt from policies currently employed and also past experiences?
3. What has been the output of madrasa mainstreaming policies in the past? How can these be improved to provide equal opportunities in life to children enrolled in madrassas?

9. TECHNICAL & VOCATIONAL EDUCATION & TRAINING

Manpower trained with IR4.0 relevant skills is necessary for steering the economic growth of any country. The present day rapid socio-economic growth demands a mixture of trained manpower, comprising of skilled workers, tradesmen, technicians, technologists, engineers, and research & development scientists. The composition of the required workforce would depend upon skills needed by the local industry, international market and the emerging Gig economy.

An increased demand for the skilled workers in all sectors, both domestically and internationally, is expected in the coming years. For steering growth of Pakistan economy, the Government of Pakistan has earmarked Construction, Hospitality, IT, Allied Health Services and Agriculture & Livestock as the prime sectors and agents of change. For catering to the need of shortage of manpower in GCC and aging economies of Europe and Far-east special focus on skilling manpower is needed.

The Technical & Vocational Education and Training (TVET) system in Pakistan is undergoing a structured transformation towards a well-defined formal setup. The National Vocational and Technical Training Commission (NAVTTTC) serves as the sector regulator, overseeing entities such as Provincial Technical Education & Vocational Training Authorities (TEVTAs), Trade Testing Boards (TTBs), Boards of Technical Education (BTEs), Punjab Skills Development Authority (PSDA), Punjab Skills Development Fund (PSDF) and Benazir Bhutto Shaheed Human Resource Research and Development Board (BBSHRDB). While Punjab and Sindh have successfully integrated TVET institutions under their respective TEVTAs, fragmentation persists in KPK, Balochistan, and AJK. Assessment and certification functions are managed by provincial BTEs and TTBs, with the involvement of Provincial Ministries of Social Welfare through their dedicated institutes, reflecting a concerted effort to align the TVET system with global standards and industry needs.

Provincial ministries of social welfare also work in the TVET sector through their Institutes. There are more than 4000 Public and Private TVET institutions across the country. Pakistan hosts a considerable number of uncertified skilled and semi-skilled workers in the informal sector. Efforts are being made to bring this informal workforce in the realm of formal sector through Recognition of Prior Learning (RPL). The uncertified skill and semi-skilled worker is tested and certified through RPL. This is highly important as it is estimated that it trains twice as many people as formal TVET.



Pakistan's first National Vocational Qualification Framework (NVQF) was developed in 2015 in light of the recommendations of the National Skills Strategy (2009-2013). NVQF provides a national framework for TVET sector. Its objective was standardisation & recognition of qualification, implementation of Competency Based Training, and facilitation for Recognition of Prior Learning (RPL). Pakistan's NVQF is based on the European Qualification Framework (EQF).

The 9 years of implementation experience provided valuable insights and lessons, that led to revisions in the NVQF to align it with qualification frameworks of countries of destinations of migrating workers in order to facilitate export of skilled workforce and meet the requirement of local industry.

A more practical and hands on oriented approach of teaching and assessment "Competency Based Training and Assessment (CBT&A)" has been introduced. The curricula developed on CBT&A approach reviewed continuously. However, implementation of CBT&A remains a challenge due to lack of infrastructure, teacher training etc.

TVET graduates typically have higher employability than those from general education, based on their practical, industry-relevant skills. Reports from UNESCO and the World Bank confirm that TVET graduates often secure jobs faster and earn better wages, as they are better prepared for immediate entry into the workforce.



Procure jobs faster and earn better wages, as they are better prepared for immediate entry into the workforce. This makes TVET a valuable pathway for achieving job readiness and career success. It is important to note that most students in Pakistan are enrolled in general education. Many students spend 10 to 12 years in general education, and those who drop out afterward often lack marketable skills. Recognizing this, the Ministry of Education has introduced the integration of TVET into general education through Middle Tech, Matric Tech, and Inter-Tech. This is a successful model that can target dropout students, providing them with skill training under NVQF levels L1-2 in Middle Tech, L2-4 in Matric Tech, and L5 in Inter-tech. Thus, students who leave at any level will have a skill qualification, helping them secure employment. While this model is currently practiced in the federal board, it should be made mandatory in general education as a TVET subject from primary through HSSC.

The TVET system is confronted with a plethora of problems and issues relating to quality and relevance; articulation between different streams of TVET, inadequately trained instructors; mismatch between supply and demand; lack of private sector's involvement, lack of institution-industry linkages & workplace experience during training; gender disparity, access and equity and a poor social image of TVET, etc. Teachers training is the weakest area of TVET delivery systems.

The test of effectiveness of a TVET system can be seen in relevant employment of its graduates. These require tracking and tracer studies. Pakistan does not have any such system on scale. However, feedback of those involved in the sector is that programmes run by the government lag the requirements of the industry. The reasons are often a mismatch between the training provided and the actual demand in the job market. Training programmes fail to equip individuals with the skills that industries require, leading to unemployment.

Technical and vocational education is expensive. It needs to continuously adjust to an everchanging market as new technologies emerge. TVET in the public sector institutions is highly subsidized and only a fraction of expenditure is defrayed through small fee charged from the trainees. In many countries, different approaches are employed to finance TVET. The important ones are:

1. **Public Financing:** dispensed on the assumption that ultimate responsibility for development of human resource for national development lies with the government;
2. **Enterprise Financing:** e.g., single employer financing, pay roll tax, tax rebates & credit schemes and vocational training fund, etc.;
3. **Private and Public Sponsored Financing:** which may involve training fee; fellowship; grants and loan; sale of training/non-training service; co-financing agreement; production for profit and apprenticeship;
4. **International Donor Assistance:** which plays a very important role in setting up TVET system in developing countries by meeting high capital costs and recurring cost for some period; and
5. **Innovative Financing:** refers to creative and unconventional methods of generating funds to support and enhance TVET programs by incorporating social impact bonds, asset leasing etc.

Finding and funding trainers with the latest market knowledge is crucial, as is upgrading equipment, particularly in technology-intensive fields. Enhanced partnerships with industries can help address these challenges by facilitating access to updated equipment and expertise through apprenticeships, internships and work-integrated learning. Industry-led training is essential, and partnerships between TVET institutes and industries are needed to ensure that training programs remain relevant and effective. These hinder implementation of competency-based trainings and along with an information gap, creates the mismatch between industry requirements and programmes. Other reasons for low performance of the sector are as follows:

1. There is lack of consultation with key stakeholders like chambers of commerce and industry associations, resulting in training programs that are not aligned with current market needs. As a result, the linkages between vocational institutes and industries are weak, limiting opportunities for trainees to gain employment in relevant sectors. A National TVET Coordination Committee NTCC comprising of all TVET stakeholders including chambers, CCIs, trade associations have been constituted to fill the gap between TVET training delivery and industry demand.
2. National Accreditation Council (NAC) accredits institutions for quality control, but it is not mandatory for TVET service providers to be accredited. Mandatory accreditation across all TVET providers can ensure standardization and improve the marketability of graduates.
3. The need to introduce skill development early in the education, at the school level and the revival of the metric tech scheme on a scale.



The test of effectiveness of a TVET system can be seen in relevant employment of its graduates. These require tracking and tracer studies. Pakistan does not have any such system on scale. However, feedback of those involved in the sector is that programmes run by the government lag the requirements of the industry. The reasons are often a mismatch between the training provided and the actual demand in the job market. Training programmes fail to equip individuals with the skills that industries require, leading to unemployment.

1. Soft Skills equipping students with communication skills, behavioural skills, social responsibility, teamwork etc. should be introduced in general education to target potential trainees entering in top TVET sector. In order to improve employability of the Pakistani workforce, NAVTTC has incorporated soft skills and entrepreneurship module in all training courses
2. The second set of skills (after transversal) necessary for the market are digital skills. Digital literacy should be a foundational skill in all TVET programs. Emphasizing digital transformation, including virtual training and simulation technology, can help address gaps in both training accessibility and quality. Digital learning should be an important marker of non-formal education and skills programmes as well. At present schools (with some exceptions) do not have the capacity to develop these skills.

Another area of concern in TVET is low female participation in the labour force. It is the lowest in South Asia. Dedicated initiatives to promote female participation, such as scholarships, gender-sensitive infrastructure, and targeted campaigns, are necessary to address this gap.

In addition to the intrinsic issues of TVET discussed above, problems arising from low quality school education also impact marketability of TVET trainees. The following issues which originate in schools impede the quality and employability of TVET graduates.



Questions for TVET

1. What are the key problems in delivery of quality TVET? How can these be resolved?
2. What are the impediments in development of strong industry-institution linkages? How can they be eliminated?
3. What is the best approach to address funding issues in TVET? Could public-private partnerships help share costs and improve access to resources?
4. How can decisions and information systems be improved in the market? Would a nationwide graduate tracking system help measure employment outcomes and improve program responsiveness?
5. What are the reasons for gender gap in the labour market? Could flexible training options and awareness campaigns improve female participation in TVET programs?
6. What innovative approaches can be adopted to improve accessibility and inclusivity in TVET programs, especially for marginalized communities?
7. How can digital transformation in TVET be accelerated to align with emerging technologies and global standards?
8. What strategies can be adopted for improving the image of TVET in society in general making it a choice of career?
9. What are the key issues in implementation of the National Qualifications Framework (NQF)? How can these be rectified? (Will the NQF allow lifelong skill improvement and improvement of qualifications?)
10. What are the key challenges of introduction of skill based training in schools?
11. What are the challenges in introduction of metric tech scheme on a scale? What are the best approaches to introduce the scheme as per the needs of each province?



10. HIGHER EDUCATION

The higher education sector in Pakistan has experienced significant growth in the last two decades, largely driven by major investments in infrastructure, faculty development, and access to education (2.5% to 12%). However, despite this expansion, the sector continues to face several challenges that hinder its ability to deliver high-quality education, perform cutting-edge research, and contribute effectively to the socio-economic development of the country.

Effective governance reforms, increased investment in research and innovation, and the use of technology will be crucial to achieving these goals. With the right implementation, Pakistan's higher education sector can become a key driver of socio-economic development and national progress.

This chapter provides current needs, challenges, objectives, and strategies for improving the higher education sector in Pakistan. The aim is to ensure that the education system is aligned with global standards and be responsive to the demands of modern industries, ultimately transforming Pakistan's higher education into a globally competitive and innovative sector.

10.1 Challenges in Higher Education

In recent years, the higher education sector in Pakistan has seen rapid expansion, but the changing global landscape and national requirements demand a deeper evaluation of its needs. The primary need is to improve the quality of education. Many universities struggle to provide education that is relevant to modern industries and global standards. There is a critical need to enhance the quality of teaching, improve learning outcomes, and ensure that research outputs meet global benchmarks.

Another key need is **increased access to higher education**. Despite the expansion of educational institutions, only 12% of the eligible age group currently has access to higher education, leaving a significant gap in participation. This gap is particularly evident in rural and underserved areas, where socioeconomic disparities limit access to educational opportunities. To address this, there is a pressing need for the development of digital learning platforms and the promotion of distance learning to reach students in remote areas.

To address **quality issues in higher education**, the Quality Assurance Framework recently developed by HEC in collaboration with Quality Assurance Agency of UK, needs to be streamlined based on ground realities and implemented effectively.



In addition to access and quality, **enhanced research capacity** is crucial for national development. Pakistan's research output, particularly in critical areas such as science, technology, engineering, and mathematics (STEM), remains below global standards. There is an urgent need to invest in research facilities, foster collaboration between academia and industry, and promote innovation. **Economic relevance** is another vital need. Higher education institutions must align their curricula with the needs of the economy, producing graduates equipped with the skills required by modern industries. This is especially important in fields such as agriculture, health, ICT, and business, where there is high demand for skilled professionals.

Finally, **gender equity** remains a significant challenge in higher education. While a significant progress has been made in improving the gender balance in university students, with the current female to male ratio of 48:52 and still reflects significant inequality amongst university teachers (i.e. less than 40 % female population). Achieving a 50:50 gender ratio in students will require targeted interventions, including scholarships and support programs for female students, but major efforts are required to address the gap of inequality in teachers and other staff, which includes improvement in gender-sensitive working environment including daycare facilities for infants/nursing mothers amongst others.



The higher education sector in Pakistan faces several challenges that hinder its growth and effectiveness. One of the most pressing issues is **limited funding**. Despite the substantial expansion of higher education over the past two decades, funding has not kept pace with the sector's needs. It is proposed that allocating 1.5% of the GDP to the higher education sector, but this remains insufficient for supporting the necessary infrastructure, faculty development, and research activities.

Another challenge is the **compromised autonomy** faced by public universities. Bureaucratic interference often prevents universities from making critical decisions related to resource management, interaction with industry, faculty recruitment/retention, and curriculum development. This compromised autonomy limits their ability to innovate and respond to changing educational and economic demands. The issue of **quality assurance** also poses a significant challenge. There is considerable variation in the quality of education across universities, and the absence of a standardized accreditation system has resulted in inconsistent standards. Ensuring that all institutions adhere to high-quality benchmarks is essential for improving Pakistan's standing in global education rankings. The **Faculty Development** is an important pillar of quality education, which needs immediate attention including provision and proper implementation of **sabbatical leave** and ease of availing leave.

Inadequate research and innovation output is another area of concern. Weak linkages between universities and industries have limited the commercialization of research, while the patenting of intellectual property remains underdeveloped. Universities must focus on producing research that addresses national priorities and contributes to technological advancement. To promote Academia-Industry interaction, role of the 3rd pillar (Government through Ministry of Science & Technology) of the Tripple-Helix is somehow completely ignored in the past. The last meeting of the National Commission of Science & Technology (NCST), headed by Prime Minister was held in 2002, which resulted in the revolution of IT and emergence of Higher Education Commission (HEC). Activation of NCST will help promote academia-industry interaction, essential for knowledge-based economic growth of the country.

Finally, **inequitable access** to higher education is a persistent challenge. Students from rural areas and disadvantaged socio-economic backgrounds are underrepresented in universities. Addressing this issue requires targeted policies that provide financial support and educational opportunities for marginalized communities.

10.2 Objectives of Higher Education Reforms



The first objective is to **expand affordable access to higher education** using open and distance learning platforms. By leveraging technology, we can reach students in remote and underserved areas, ensuring that educational opportunities are available to all, regardless of geographic location or socio-economic status. The second objective is to **enhance research capacity** in universities. This will be achieved by increasing investment in applied research, particularly in STEM fields, agriculture, healthcare, and business. The public-private partnerships is encouraged to promote the commercialization of research and innovation, ensuring that academic research contributes to national development goals.

Improving the **international ranking of universities** as well as subject-wise global ranking (more important for students/parents) is another major objective. In this regard it is proposed to revisit national university ranking based on the recently developed quality assurance framework, thus to help support in rightly choosing University/Department/Institute for admission and to achieve global recognition through greater academic autonomy, enhanced financial support, and faculty development programs. Another key objective is to achieve **gender equity** in higher education both in students and teachers/staff through appropriate measures as mentioned above.

Finally, the **reforms governance structures** within universities are important. This includes decentralizing decision-making powers, improving transparency and accountability, and promoting a performance-based culture in higher education institutions. Universities will be encouraged to innovate and manage their resources more effectively, ensuring long-term sustainability.

10.3 Multiple Learning Paths

HEC developed the National Qualification Framework (NQF) in 2015. It provides multiple paths for students in various streams for transition to higher education while the NQF also standardises the placement of a qualification. There are 8 levels provided in the Framework: the PhD being the highest at level 8 (NQF, annex-IV).



National Qualifications Framework provides clearly defined levels of Knowledge, Skills and Competencies to be acquired by each graduate that are easy to comprehend by students, employers and human resource development policy makers.

NQF 2015: Higher Education Commission, Government of Pakistan

A similar document of NAVTTC is aligned to HEC's NQF. There are two issues that were highlighted. The first one is that the National Curriculum Council (NCC) has to develop competencies for levels 1 to 4. These are pending. The second, more significant issue is that the admission policies of universities do not conform to the spirit (and objective) of NQF. Most universities, especially in the public sector, have quotas for children who qualify from the technical stream. Also the entry tests do not accommodate the practical, hands on, skills and knowledge of the TVET graduate. This negates the principle of the NQF. Universities are autonomous organisations, and HEC cannot regulate the admission policies beyond the large guidelines provided. The differentiation will have to be resolved through engagement with universities.



Key Questions for Higher Education

1. What are the main obstacles to achieving quality, equity and higher participation in higher education?
2. What are the main reasons for high unemployment and under-employment among educated youth?
3. What are the reasons for the mismatch of demand and supply of skills and qualification between market and academia?
4. What are the reasons for the leadership and governance challenges?
5. What should be the long term vision for Pakistan's higher education sector?
6. What are the key issues in the National Qualifications Framework 2015, that require a review?
7. How can the implementation of NQF be improved?



11. ISLAMIC EDUCATION

The state of Islamic Republic of Pakistan was created with a great purpose i.e. its ideology derived from two-nation theory. Central to this ideology are the concepts of Islamic universal teachings aligned to human nature. Therefore, this education policy framework of Pakistan must be lined up with the foundational principles that shape the national identity, including the Two-Nation Theory, Islamic values and ethics, and the provision of religious education for minorities living in Pakistan. It is imperative that Pakistan's education system should reflect this historical context while fostering a sense of unity among all citizens. Educational curricula should include comprehensive studies of Pakistan's history, emphasizing the journey towards nationhood and the key figures instrumental in the struggle for independence. This framework aims to promote a cohesive, inclusive, and progressive educational environment that respects Pakistan's diverse cultural and religious landscapes.

The vision of this framework is that education system of Pakistan must be built around the words of its name i.e. Islamic Republic of Pakistan to develop the ethical ethos including peaceful coexistence in generations in line with the teachings of Islam. Our education system must incorporate Islamic values and ethics into its all endeavours. These values, rooted in justice, equality, equal economic opportunities, empathy and compassion, should guide the moral and ethical development of students. Educational institutions should serve not only as centres for academic knowledge but also as spaces for character building and ethical development.

In line with the Constitution and the requirements of the people of Pakistan Islamic education has been a part of every curriculum. In recent years these have been prepared and reviewed under the guidance of senior scholars of Islam or the Ulema. The practice needs to be continued. However, efforts are needed beyond the curriculum. Teacher training on teaching Islamic education and values needs more focus than in the past years.

Additionally, Pakistan's commitment to religious necessities of the students belonging to minorities as enshrined in the constitution of Pakistan vide article No. 22 requires paving educational pathways that adequately represent the beliefs and traditions of religious minorities. Recognizing and valuing diversity within educational institutions will contribute to a more inclusive society for moving towards progress, prosperity and peaceful co-existence. The curriculum has always had arrangements for separate subjects on ethics for children from households of religious minorities, non-provision of textbooks to schools



and often non-availability of teachers means that the requirement of the curriculum is not implemented in schools.



Key Questions

1. What are strengths and weakness of the current official curriculum for transmission of Islamic education?
2. What have been the challenges in implementation of the curriculum on Islamic Education in schools?
3. What is the best approach to review of the curriculum for Islamic Education in schools?
4. How can these be remedied?
5. How can it be ensured that the separate provisions for minorities in terms of textbooks and teachers are met in schools?



12. GOVERNANCE CHALLENGES

A governance system combines human resource, management and environmental support. It is a combination of the skill sets of the human resource and the organizational structures and culture developed through internal management practices and external influences. Education is an open system, and external influences are higher than in many other systems. This all impacts its ability to deliver. A few key areas need to be considered when developing policies for governance and management in education.

1. Education departments have to work on the largest scale in every province.
2. Education systems are living and require ongoing review through quality data and its effective usage
3. Education processes require technical understanding, and the importance of specialists cannot be overestimated.
4. Education focuses on the child and all laws, regulations, policies and interventions for child protection and welfare are relevant (and important) for the departments of education.
5. Education is an open system that is affected by social norms and politics and thus requires close community support.

12.1 The Scale

Scale is the most visible component of education. The departments of education are the largest employers in every provincial government. The size and scale of the workload of Public Education Sector in each province is depicted in table 2:

Table 2: Scale of the Education in Public Sector

Province/Area	Teachers	Schools	Students
Punjab	376,087	53,318	12,497,177
Sindh	118,426	40,574	4,444,801
Khyber Pakhtunkhwa	182,330	34,497	5,397,890
Balochistan	51,519	15,236	1,119,925
Gilgit-Baltistan	8,216	1,637	184,298
Azad Jammu & Kashmir	36,665	6,221	536,994
Islamabad Capital Territory	6,690	425	162,620
Total	779,933	150,271	24,343,705

Source: Pakistan Education Statistics

The above table does not include children in private schools and those who are out of school. Table 3 shows that private schools have an enrolment of 16.8 million.

Table 3: Scale of the Education in Private Sector

Province/Area	Teachers	Schools	Students
Punjab	539,408	47,292	8,655,455
Sindh	144,083	12,064	3,993,660
Khyber Pakhtunkhwa	128,636	10,104	2,709,693
Balochistan	13,702	1,165	342,013
Gilgit-Baltistan	8,023	644	110,951
Azad Jammu & Kashmir	41,321	3,436	670,513
Islamabad Capital Territory	33,756	1292	331,701
Total	908,929	75,997	16,813,986

Source: Pakistan Education Statistics

All these children are also the responsibility of the state. A more effective and efficient delivery will need to develop the capacity to manage growth in the number of children, schools and teachers. The

challenges of large-scale service delivery will inevitably require a review of the governance structures, models of management and financing. Practically, governance structures have not changed (at least not commensurately) with the increase in scale since the time of independence. This has stretched its capacity to the point where it has become ineffective.

Table 4 shows that the number of primary schools have increased by a multiple of 19, middle 22 times, secondary 85 times and higher secondary (including intermediate colleges) 203 times of the numbers in 1947-48 but the structure, as mentioned above, have remained unchanged in terms of numbers. More importantly, as discussed below, the quality of the technical bureaucracy has also declined. Both combine to impact governance and management.

Table 4: Growth (by multiples) of Number of Institutions and Enrolment Since 1947-48

	Primary	Middle	Secondary	Higher Secondary
Number of institutions	19	22	85	203
Enrolment	47	40	77	153

Source: Pakistan Education Statistics 2021-22

The above table does not provide growth rates (and scale) of private schools which, as mentioned, are additions to the governance responsibility of the education bureaucracy.

12.2 Centralisation

There are two implications of scale on system delivery. Firstly, the need for expanding the education bureaucracy and secondly decentralisation of responsibilities. There has been increased centralisation of monitoring, management and operational decision making in education. District offices and below primarily work as 'post offices' between the main secretariat and the schools. Education systems are divided into multiple functions. These need to be clearly distributed among various levels. (A suggested approach has been shown in Annex II)

12.3 Measurement and Use of Data

Pakistan has loads of education data. Most provincial EMIS's started functioning in the early 1990s. These were preceded by statistical sections. There are three decades of longitudinal data. In 2004, the first national sample based large scale assessment was conducted under the National Education Assessment System (NEAS). There have been three iterations since then, under different names. The latest has been the National Achievement Test (NAT) 2023 carried out by Pakistan Institute of Education (PIE). PIE also collates national data of the education system provided by the provinces in its report compiled by National Education Management Information System (NEMIS). and recently, the Institute has also published data on education financing.



Punjab Examination Commission (PEC) has been functioning since 2007, and the examination boards have been sitting on loads of data produced by a number of examinations per year. Recently, Balochistan Assessment and Examinations Commission (BAEC) has conducted diagnostic assessments. The multiple boards of examinations conduct more than one examination every year. There is also university based entrance tests taken by all professional public and private universities in different disciplines.

The output data as ascertained through sample-based assessments or population-based examinations need to be used to diagnose children's learning challenges through a feedback loop, which is missing. The current system of assessment and examination is used only to measure the achievement over expected learning outcomes but does not provide any support to the teachers or schools as to what needs to be improved in their teaching and how? This loop needs to be strengthened.

All of the above learning outcomes data remains grossly underutilised by policy developers and implementers. No education reform has used this data in its entirety. The system internally does not have the capacity to use data for research, identification of problems and tailoring policies accordingly as an ongoing process. The problem of limited use of data is not confined to information on assessment and examinations alone. Effective use of other data in planning, implementation and monitoring also requires a review.

Standardised definition for coherence in reported national data is important. An important area is the age cohorts for various levels. National Education Policy 2009 called for ages 6 to 10 to be notified as the official cohort for the primary level, 11 to 13 for middle and 14-15 for secondary education. This have never been notified and confusion of indicators like NER and GER continue and even the Pakistan Social and Living Measurement Survey uses two sets: one for 5 to 9 and the other for 6 to 10 for primary. The parallel, different age groups, continue into reporting of middle and secondary cohorts. This is an unsettled area. So is the age for pre-primary early childhood education. While individual provincial policies define these, mostly for two years of ECE, a national standardized age group and years of official schooling for ECE is missing.

12.4 Limited Research and its Usage as Evidence

Relevant research on education in Pakistan is limited. Even this limited research is not utilised in policy development. There is an absence of culture of research based policy development and planning that is more entrenched than even the data usage issue discussed above. Policies will need to recognise the value of quality, contextual, research to improve education outcomes.

The challenge of production of quality research can also be attributed to the weak capacity of researchers and weaker incentives for university based researchers to carry out policy relevant research. The challenge of use of research pertains to the weak capacity of the researchers to communicate research in the language of policy makers, short timespan of policy makers to take decisions, weak government inside research wings and absence of culture in the government to commission research for policy.

12.5 Decline of Specialists in Technical Bureaucracy

As per the original design of the provincial secretariats, the directorates are required to take charge of the core work of a department. In case of education, this has either shifted to development partners, development partners working with a specialised unit and the Secretary of Education.

It means a centralisation and shift of ownership from the technical unit. **It is important to recognise this decline as a problem, assess its cause and find remedial options. Without quality educationists running the system in routine sustained improvement is not possible.** The technical bureaucracy includes district level officials of education. Without quality technical bureaucracy that can review education process, plan implementation and support teachers, it is difficult to see improvement of the teaching learning process in the classroom. The current model is a top down compliance based approach that results in mere coverage of syllabus, as seen above.

The other important set of technical bureaucracies are the bodies responsible for the development of curriculum, teacher education, textbooks and examinations. There have been no detailed assessments of their capacities, except teacher education. The curriculum and textbook units in the provinces do not have trained specialists and it was one of the reasons National Curriculum Council was formed at the federal level despite the introduction of the 18th Constitutional Amendment. These capacities are essential and have received much lower focus as compared to teachers.

12.6 Legislative Framework

Multiple laws in provinces impact child welfare. Some of these are not administered by the departments of education. Issues related to child protection, social welfare, health and other aspects catered to by other departments are often not considered in education policies and planning. Collation and analysis of these laws, and their effectiveness, will assist in obtaining a clearer picture of the situation and the potential of the system to support child development and welfare. All relevant statutes and department have to be included in education governance to the extent they overlap with the objectives of education.



12.7 Education as an Open System

Political support is essential to educational development. However, interventions that are driven by considerations other than needs of education can be, and have been detrimental, to education. Recruitment processes have been shifted to merit based processes in all provinces. This has also, apparently, slowed down the recruitments and increased the gap between demand and availability of teachers. Politicisation of transfers and postings still exists, even though it varies depending on a number of factors with varying degree in different provinces.

Globally, community support has an important role in school education. This again, despite, multiple reform efforts, remains a weak area. Parental and community involvement in schools requires effective school leadership but also parents who are not available as poverty prioritises income earning, and hierarchy makes them subdued audiences to teachers who have higher 'social status' due to their scales as government servants. Both these areas are important for any policy reform, even as community engagement will not be resolved through efforts of the departments of education alone.

12.8 Financing Education

Total national education budget of the country compiles to 1.87% of the Gross Domestic Product (GDP) which is lower than the generally accepted benchmark of 4% of GDP. As percentage of overall budgets these figures are between 15 to 20% of the public sector budget (except for the federal government due to the larger scope of the budget and limited coverage of education in terms of area). More important than the amount of money allocated is the value for money. System efficiency as seen above is low, with almost 80% children dropping out of school before entering secondary school. Improvement of internal efficiency does not necessarily require high cost solutions, especially, if reform of curriculum, textbooks and examinations is focused.

However, increase in participation (a key outcome of increased internal efficiency) will require additional resources: schools, teachers, textbooks, examinations costs etc. As mentioned earlier the requisite budgetary increases may not be supported with the given state of the economy and even with economic growth the current unit costs are very high (teacher salaries and construction costs). Other models will have to be considered. Public Private Partnerships (PPPs) for delivery will need to be reviewed as an option.

12.9 Innovative Financing for DRR and Management

Pakistan's high risk status as one of the top countries to be impacted by climate change has already manifested in floods in the Sindh province in 2022. About 19,500 schools were impacted, out of which 7500 were irreparably damaged. The situation displaced 2.3 million children from schools. The province continues to struggle with resources in reconstruction of these schools as it requires financial needs beyond the routine funding.

Innovative financing options will need to be explored to prepare the education system for Disaster Risk Reduction (DRR) and manage and mitigate impact of possible disasters. These may include partnerships with corporate partners, setting up of specialised funds and others. Detailed discussions and exploration of possibilities will be required.

12.10 Inter Provincial Coordination and Standardisation

The 18th Constitution amendment, while providing the much needed provincial autonomy in social service delivery, has also created the need for more forums for inter-provincial coordination. This cooperation and coordination is necessary from multiple perspectives. Firstly, some basic standardisation of education outcomes and learning across the country that, among others, will allow easy transition of students migrating from one province to another. It is also important to ensure a balanced human resource growth across all provinces. The cooperation and coordination, including cross learning, has been an ongoing feature of the work in the last decade and a half since the introduction of the 18th Amendment. At the ministerial level, the Inter-provincial Education Ministerial Conference (IPEMC) has been an important forum at the national level. However, equivalent technical level forums with an institutionalised mandate have been missing. The whole area of mutually beneficially inter-provincial and federal cooperation needs to be reviewed.

12.11 Public Private Partnerships (PPPs)

School education is a fundamental right of the child. Article 25-A of the Constitution, unambiguously, provides this right. This means it becomes the responsibility of the State to provide quality education to every child. What does this responsibility entail? The traditional model of education, recognised in society, is the government school building, the teacher employed by the government and recurrent expenditure of school maintenance being paid by the official budgets. Most countries in the world follow this model but it is not universal.



The model taxes state expenditure and already, in each province, departments of education employ the highest number of the work force. It has become increasingly difficult for provincial governments to employ more teachers and develop more infrastructure. At present nearly 80% children drop out of school before reaching secondary education, about 50% are lost by grade 5. As the system improves these dropouts will be reduced and the pressure for accommodation of higher numbers in school premises will increase. What will be the financial cost of infrastructure needs of more children in the system? Also, what will be the budgetary outlays required to pay teachers and other employees?

The above, potential, situation does not eliminate the current infrastructure needs where, among others, a 'bottleneck' is seen after primary as the number of middle schools reduce drastically. A ratio whose trend has not changed since independence even as the number of schools have increased.

The vacuum has been, at least partially, filled by growth of low cost private schools all over the country. The trend started in larger cities as the state could not provide access to schools for the growing population and the urban sprawl. The cost of land in urban areas prevents construction of new schools in urban areas and the last major ones were established a few decades ago. The phenomenon of sprouting of low cost private schools also slowly shifted to smaller towns and even rural areas. Part of the growth, at least, was based on the perception of better quality of learning in these schools. This view gained official recognition after Learning and Educational Achievement in Pakistan Schools (LEAPS) study on learning achievements of public and private schools in rural Punjab. The 'relatively' better achievement of the latter became the basis for strong advocacy of the model and the need for scaled up public-private partnerships for education delivery. Punjab Education Foundation (PEF) was revamped as an organization that now supports the largest public private partnership model on education delivery. Similar approaches also exist in other provinces that includes the more unique model of Sindh Education Foundation (SEF). Even the Federal government ran the large operations of the PPP model of the National Education Foundation (NEF) and the community run schools of the Basic Education Community Schools (BECS).

The two systems, the government owned schools and PPPs, continue to coexist. The debate on arguments of quality and resources continues. Given the resource constraints, and a growing population, at least in the near future less costly PPP model appears to be the more practical approach. However, it does raise some questions that need to be answered.



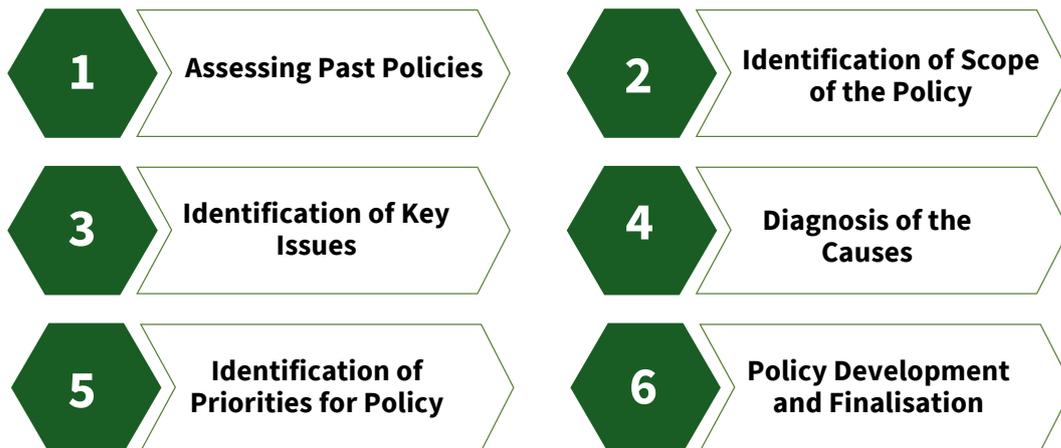
Key Questions

1. What has prevented effective decentralisation in education?
2. Which functions can be decentralised in the short term?
3. What type of capacity development work will be required for effective centralisation?
4. What are the gaps in data that need to be filled?
5. What are the reasons for these gaps?
6. What strategies should be used?
7. What are the reasons for weak use of data in implementation and planning?
8. How can data usage be improved?
9. What are the reasons for weak use of research in implementation and planning?
10. How can use of research as evidence in education policy and planning be improved?
11. What are the reasons for weakening of technical education bureaucracy?
12. How can technical education bureaucracy (directorates of education, textbook boards, curriculum bureaus or equivalent and examination boards) be strengthened?
13. Is the relatively better performance of private schools true for all situations?
14. Is relatively better quality a good enough benchmark to support the model?
15. Does this 'relatively better quality' ensure that children who complete education in these schools are competitive in the job market?
16. Does the state have the capacity to regulate quality in private schools under a PPP model?
17. As the model grows (if adopted) what will be the resource implications and changes required in management approaches?
18. Will teacher shortage faced by public sector schools also be an issue for private schools (especially in middle and secondary levels where specialist teachers become a must)?
19. What other unintended consequences do we foresee in transition to this approach?
20. How effective are different PPP models in terms of access, quality and cost?
21. What are the challenges in financing for emergencies in the wake of extreme weather threats in Pakistan? What are the possible options that can be explored?



13. PROCESS FOR POLICY DEVELOPMENT

Policy for each province will be grounded in the respective contextual realities that include diversity across districts. The issues highlighted in the previous section can be included, assessed and expanded as per the situation of each province. This does not preclude the requirement of adding any other issue relevant to a provincial government as per its own identification of priorities. This identification will emerge from review of the ground realities through review of data, existing researches and grey literature, engagement with stakeholders and most importantly review of the classroom realities through feedback from teachers, heads of schools, students and communities. The key steps suggested are:



13.1 Assessing Past Policies

The last twenty years observed many reforms, policies, plans and an increase in funds for education. The scorecard of the efforts shows progress in some areas, but the net result has been the declaration of an “Education Emergency”.

The first step for development of any education policy will be to identify the reasons of the continued low achievements in all major indicators. Some of the key questions to consider for a policy review can be seen in the box:

These questions mentioned in the Box do not exhaust the list of issues that need to be probed for a better comprehension of the issues and development of a future policy that is more relevant to the need of the child and based on classroom realities.

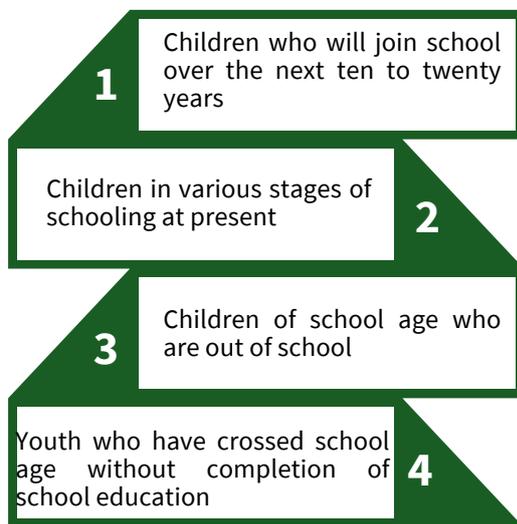
1. What are the result of previous reforms/solutions in solving same problems in the past and what are the lessons to guide new reforms/solutions?
2. Was the emphasis of past reforms in the right priority area?
3. Were diversity and other overarching issues considered in designing policy responses and interventions?
4. Was there coherence across various reforms and recognition of interdependence of various components?
5. To what extent has the COVID 19 pandemic been responsible for learning losses and erosion of gains?
6. Were adequate resource generated and provided for transformation of education?
7. What were the implementation challenges? What are the lessons learnt?



13.2 Scope of Education Policy

As the above questions (plus others related ones) are answered the policy has to consider that it will deal with a dynamic situation. A transformational change to improve education sustainability will take time, probably a generation. Ambition may need to be adjusted to the reality as it exists (and continues to shift) and gradually raised with progress. Reforms will have to recognise the variations among its target beneficiaries who are not a monolith.

In the broadest sense the policy will have to consider the following set of children and youth:



The policy, for each of its areas of priority, will need to address responses for these four categories with the recognition that the responses may vary according to the contextual situations of children in different provinces, districts and gender.

Children and youth with special needs will have to be included in each of the above categories.

13.3 Identification of the Issues

The broader issues of weak learning outcomes, access and equity have been highlighted in all data sets produced for the purpose. The policy process will begin with a deeper dive into details, disaggregating data to the extent possible. This will be supplemented with qualitative feedback from teachers and experts on issues of learning, equity, access and participation and governance that may not be gleaned through quantitative data alone.

The other important source, often not adequately utilised in policy development, is academic and non-academic research. It is important to carry out systematic review of available literature (academic and non-academic) that identifies the issues.

13.4 Diagnosis of the Causes

The next step is construction of a set of causes for the issues identified. This will be completed through construction of professional opinions on the causes of various issues identified earlier.

Education service delivery, like all governance systems, is dependent on a set of interconnected processes and procedures. Causative structures cannot be constructed separately for each of the areas of learning, access and equity and governance. There can be linkages where learning issues may actually be dependent on governance processes and not an immediate quality input.

Similar to identification of issues, causes will be constructed through detailed discussions with all relevant stakeholders, especially, the officers at the district level, teachers and head teachers.

Also, same as above, identification of issues, through literature review (academic and non-academic) to scan the possible causes behind education issues are an important source of exploring causes.

13.5 Identification of Priorities for Policy

In order to work out policy options it is imperative that a thorough account should be created of dealing with these challenges in the past and with what effect. This should also be supplemented with scanning a global literature on available policy solutions that can be brought to the table for consideration, and adapted within the local context, when working out solutions for determining policy priorities. The final policy priorities will depend on the following factors:

1. Critical to early improvement of important deficits in learning, access and equity.
2. Maximising opportunities for children who manage to reach the highest levels of education.
3. Doable in the short to medium term. This means causes where resources are not available, and structures are not in place cannot be addressed before these systems are not in place.

The set of policies identified will be moved through an iterative process with specialists and key stakeholders in the system. These would not be limited to those relevant to school education system but also higher education, planning and finance.

13.6 Policy Development and Finalisation

Policy should be aligned with the national aspirations of the Constitution of the Islamic Republic of Pakistan. It should clearly highlight the prioritisation process above and limitations that may need to be addressed in future policies. Policy should be developed by the provincial cabinet, followed by development of an implementation plan.



GUIDING PRINCIPLES

The Framework recommends a set of guiding principles for policy development that should apply to the national effort as well as the work of each provincial government. Many of these have already been discussed in various parts of the document. These are summarised here as a more specific set of principles to help guide the work of policy development. The principles combine universally accepted norms of policy development, especially, in high population countries with diversity across multiple variables.

SUBSIDIARITY

Decisions should be made as closely as possible to the level of implementation, with higher-level intervention only when absolutely necessary. Provinces should have the authority to develop localized education policies while adhering to common national objectives related to standards, teacher qualifications, and assessments. The framework should only set baseline standards, leaving detailed implementation to the local level.

FLEXIBILITY WITH ACCOUNTABILITY

Provinces should have the flexibility to innovate and adapt their education systems to local needs, provided that they meet agreed-upon benchmarks. The framework should emphasize local control over the curriculum and pedagogy but hold all units accountable for delivering comparable educational outcomes. Flexibility is encouraged in methods, but there should be clear metrics for evaluating performance. There should be some level of public accountability built into the systems.

EQUITY AND INCLUSIVENESS

Ensure that every student, regardless of their background, geographic location, or socio-economic status, has access to quality education. The framework should set minimum standards for equitable resource distribution, school infrastructure, and support for disadvantaged students, while allowing Provinces to tailor programs to their local demographics and needs.

QUALITY AND EXCELLENCE

Strive for the highest possible quality of education across the federation, fostering excellence in teaching, learning, and administration. The framework should focus on setting high standards for teacher training, educational materials, and learning environments. While the specifics of implementation can vary across provinces, there should be a shared commitment to excellence.

CULTURAL AND LINGUISTIC SENSITIVITY

Recognize and respect the cultural and linguistic diversity of the Provinces. This implies opportunity for integration of local languages, traditions, and histories into curricula, while ensuring that all students gain essential national and global competencies. This balance helps preserve diversity without sacrificing core educational outcomes.

TRANSPARENCY AND PARTICIPATION

Educational policies and decisions should be made transparently and include input from all stakeholders, including teachers, students, parents, and the broader community. The framework development process would be participatory with mechanisms for feedback from all provinces.



EVIDENCE-BASED DECISION MAKING

The framework and subsequent policies developed based on it would be grounded in reliable data, research, and best practices. The framework should promote the collection of educational data across provinces to monitor outcomes and inform decisions. Provinces should have access to and be encouraged to use this data to inform the development and implementation of their policies. The evidence-based decision making should be treated as a cycle to achieve continuous improvement.

COORDINATION AND COLLABORATION

Promote cooperation and knowledge sharing among the provinces to strengthen the national education system (as a whole). The framework should encourage establishment of mechanisms for regular coordination between the federal level and provinces, ensuring that the best practices are mutually shared, and challenges are identified and addressed collectively.

SUSTAINABILITY AND LONG-TERM VISION

Education policy should be designed with a long-term perspective, focusing on sustainable development of human capital and its integration in the 21st century workplace. As such, the framework should include provisions for continuous improvement and adaptation to rapid technological and social changes. There should also be an emphasis on environmental and social sustainability.

RESPECT FOR DIVERSITY

Ensure that the diversity of provinces is respected while maintaining a level of harmonization necessary for national coherence. The framework should not impose uniformity but seek to harmonize key aspects of education systems in a way that maintains educational integrity across provinces, while still allowing local adaptation.

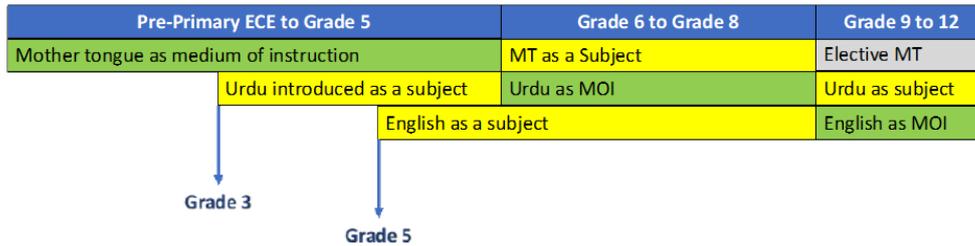
The National Education Policy Framework, NEPF 2024 is predicated on the Islamic tradition of "lifelong learning" - seeking knowledge from cradle to grave. The National Qualifications Framework (NQF, Annex-IV) provides multiple pathways to attain knowledge and excellence. NQF supports continuous professional growth through competency-based curricula and vocational training, enabling individuals to adapt to changing market demands and contribute to society at all tiers.



ANNEX - I

Possible Prototype for Language Curriculum and Prototype

A mother tongue based multilingual education needs to be pursued in most classrooms in the country. The diagram below suggest on possible sequencing where the mother tongue is the only language taught from pre-primary ECE to end of Grade 3. The language continues into the remaining two years with Urdu introduced as a subject in grade 4 and English in grade 5. The mother tongue (MT) continues as the medium of instruction (MOI) in middle school before being made an elective subject in secondary. This is based on the premise that the longer the mother tongue continues the stronger will be the language skills developed and the better they can be carried into learning the other languages.



Source: UNICEF 2023: “School Language Policy in Balochistan”

The above will not suffice if the curriculum does define the requisite standards and objectives of language learning at each level. These have been suggested in the table below.

Language	Expectations at the end of Higher Secondary School	Expectations at the End of Middle School	Expectations at the End of Primary Level
Urdu	<ul style="list-style-type: none"> Ability to speak Urdu as the lingua franca in the province and the national language of Pakistan. Ability to read and comprehend official documents prepared in Urdu and also modern prose. Ability to write documents for official purpose and also at a proficiency level that matches the standards across the country. 	<ul style="list-style-type: none"> Ability to speak the language with clarity to communicate with Urdu speakers who do not use it as a mother language. Have the ability to read children’s literature (prose and poetry) in Urdu language. Have the ability to write essays and short stories in Urdu 	<ul style="list-style-type: none"> Ability to speak, even without proficient flow, enough to communicate the message to the teacher in Urdu. Ability to recognise words and read simple paragraphs and one-page stories (class 1 level for a child whose mother language is Urdu) Ability to write sentences in Urdu.



Language	Expectations at the end of Higher Secondary School	Expectations at the End of Middle School	Expectations at the End of Primary Level
English	<ul style="list-style-type: none"> • Ability to speak English at a level that is acceptable as communication in official situations (e.g., job interviews). • Ability to read modern prose in English language. These may include short stories and novellas. • Ability to read textbooks at the graduate level in the university with comprehension. • Ability to write short stories, essays and precis in English. 	<ul style="list-style-type: none"> • Ability to speak the language with clarity to communicate with English speakers who do not use it as a mother language. • Have the ability to read children’s literature (prose and poetry) in English language. • Have the ability to write essays and short stories in English. 	<ul style="list-style-type: none"> • Ability to identify and articulate the basic alphabets and sounds. • Ability to read the alphabets and words in English through recognition of the phonemic arrangements and requirement.
Mother Tongues	<ul style="list-style-type: none"> • As an elective subject, have the ability to speak like a native speaker. • Ability to read prose and poetry of a high level in the language. • Ability to write short stories, essays, precis and critical pieces. 	<ul style="list-style-type: none"> • Ability to speak the mother tongue fluently with an addition of 25% vocabulary from primary level. • Ability to read and comprehend prose writing in the mother tongue. • Ability to write short stories and essays and summarise passages. 	<ul style="list-style-type: none"> • Ability to speak with fluency and addition of 50% to the vocabulary from pre-school levels. • Ability to read children’s books with comprehension. • Ability to write letters and short stories.



ANNEX - II

Possible Distribution of Functions at Various Levels

Function	Primary Responsibility	Supplementary Involvement	Details
Policy	Provincial level (Secretariat and Directorate or equivalent) – can be coordinated by the federal government.		
Planning	Collation of district plans relevant provincial level planning	District, sub-division and schools (can add union council also)	Will require capacity, finances and more autonomy.
Monitoring	All levels with clear demarcation but the primary responsibility should be at the district level in routine.	Sub-divisional and school levels (cluster heads where these clusters function).	Monitoring should be aligned to the planning process and structure.
Teacher Recruitment	Provincial for secondary school teachers. District for middle and primary schools		
Teacher Management	Provincial level to be responsible for inter-district transfers and postings, human resource planning and compensation.	District level for intra-district transfers and postings with autonomy for sub-divisional levels in case of local transfers.	
Teacher Professional Development	District and schools: professional development includes training, support and mentoring.	Provincial levels can help identify select areas for training and support.	
Standards	Provincial level	Monitoring and implementation at the decentralised level	Standards may need to be flexible and depend on level of development of a district.
Curriculum Review	Provincial government (can be coordinated by the Federal government)	Monitoring, implementation and feedback for review at the decentralised levels, especially, schools.	
Textbooks Preparation	Provincial government (textbook boards)	Monitoring, implementation and feedback for review at the decentralised levels, especially, schools.	
Assessment and Examinations	Province for large scale high stakes and diagnostic assessments and schools and districts for ins school examinations and assessments.		



Function	Primary Responsibility	Supplementary Involvement	Details
School Establishment	District level should identify need.	Provincial level should review and finalise approval	
School Development Plans	School level	Coordinated and monitored by the district and sub-divisional levels.	
Community Engagement	Schools	Coordinated and monitored by the district and sub-divisional levels.	
Student Welfare and Protection	Schools	Coordinated and monitored by the district and sub-divisional levels.	
Inspection for Quality	Province and district with clearly divided responsibilities.		The provincial level should conduct field inspections less frequently than the district officers.



ANNEX - III

Suggested Strategies for Addressing Higher Education Needs

To achieve objectives of higher education, several strategic approaches are outlined in this document. One of the key strategies is to expand market-driven enrolments in universities. This involves aligning academic programs with the demands of the labour market and international standards. Universities will work closely with industries to develop programs that equip students with the skills needed for modern economies, ensuring that graduates are employable and relevant in their fields.

Another important strategy is to develop national research centers and Tier-1 universities in critical areas such as Science Technology Engineering & Mathematics (STEM), agriculture, health and Information Communication Technology (ICT). These institutions will focus on cutting-edge research and innovation, driving the development of new technologies and solutions to national challenges. Collaboration between universities, government, and the private sector will be essential to foster innovation and commercialization of research. Improving the quality assurance framework is also a priority. The PSG-2023 Quality Assurance Framework will be implemented across universities to standardize the quality of education, research, and administration. Strengthening Quality Enhancement Cells (QECs) and ensuring that accreditation councils operate with transparency and objectivity will help raise the overall standard of higher education in Pakistan. Financial assistance and scholarships will be provided to students, particularly those from disadvantaged backgrounds and in fields critical to national development. This will help reduce barriers to access and ensure that talented students can pursue higher education regardless of their socio-economic status.

The public-private partnerships in the higher education sector will help to improve access as Government funding is shrinking due to financial constraints. Engaging the private sector in funding research, developing curricula, and offering faculty development programs will help drive innovation and ensure that universities are responsive to the needs of the economy. The establishment of technology parks, incubators, and research hubs within universities will promote entrepreneurship and commercialization of research. Leveraging technology for education is another key strategy. Universities will adopt AI and digital platforms to enhance the learning experience, implement online learning management systems, and create virtual labs. These technologies will help bridge resource gaps and provide students with access to modern educational tools.

Finally, a plan for governance and leadership reforms will help to improve University leadership. The appointments of VC strictly on merit will be revamped to attract visionary leaders who can drive institutional growth particularly when the process of un-interrupted/continuity of university leadership is in place through a Standing Search Committee, not influenced by the change of Government. Performance-based evaluations for university staff will be introduced, linking institutional progress to key performance indicators such as research output, teaching quality, and graduate employability.



ANNEX - IV

National Qualification Framework (NQF): Programs by Levels and Credit Hours Requirement (New System)

	Levels	Award Type	Award Example	Semesters	Technical/Vocational
Higher Education Levels	8	Doctoral	PhD	18 Crt Hrs course work and dissertation evaluated by at least two PhD experts from technologically /academically advanced countries in addition to one local expert and doctoral Committee members	
	7	Masters	MA/ M.Phil / MS/MBA, M.Sc. (Eng.), M E, M.Tech	Minimum 30 Credit Hours with thesis or without thesis	M.Tech (Master in Technology) 30
	6	Bachelors (Hons)	BA/ BS, B E, B.Arch, BSc (Eng.), BSc (Agr.), B.Tech (Hons) MA/MSc (16 years), LLB, B.Com (Hons), MBBS, DVM, BDS, PharmD	8-10 semesters / 124-140* Credit Hours	B.Tech (Hons) (B.Tech) 124-140 Crt. Hrs.
	5	Associate Degree Ordinary Bachelor	BA/BSc (Pass), B.Tech (Pass), Associate Degree etc	4-6 semesters /50+ Credit Hours	B.Tech (Pass) (Bachelor in Technology)
Higher Secondary Education	4	Higher Secondary School Certificate (HSSC)	F.A, F.Sc, ICS, I.Com, DBA, D.Com etc.	A Level	DAE (Diploma of Associate Engineer) (College of Technology / Polytechnics)
Secondary Education Level	3	Secondary School Certificate (SSC)	Matriculation	O Level	National Vocational Certificates (Level 1 to 4)
Basic/Elementary Education Level	2	Middle (3 Years)			
	1	Primary (1-5 Years) Primary (1-2 Years)			

Source: National Qualifications Framework of Pakistan 2015, Higher Education Commission (HEC)

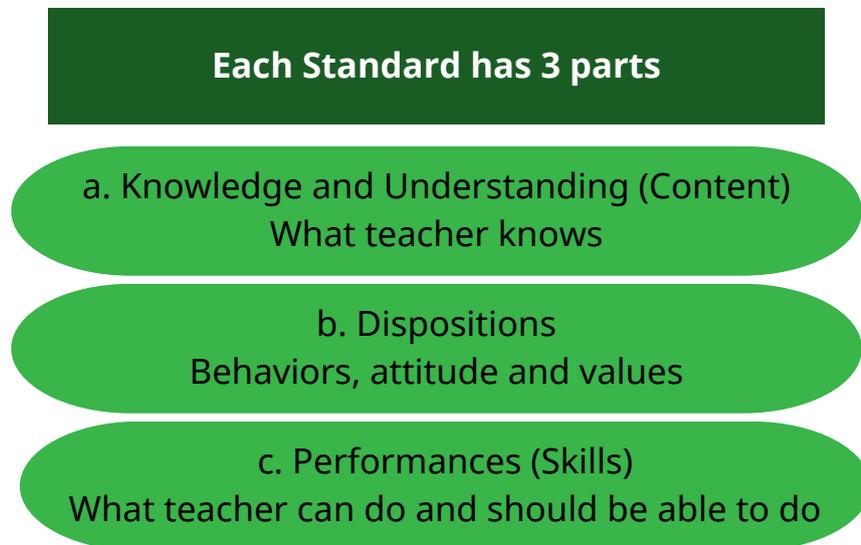


ANNEX - V

Professional Standards for Teachers in Pakistan

Standard 1:	Subject matter knowledge
Standard 2:	Human growth and Development
Standard 3:	Knowledge of Islamic ethical values/social life skills
Standard 4:	Instructional planning and strategies
Standard 5:	Assessment
Standard 6:	Learning environment
Standard 7:	Effective communication and proficient use of information communication technologies
Standard 8:	Collaboration and partnerships
Standard 9:	Continuous professional development and code of conduct
Standard 10:	Teaching of English as second/foreign language (ESL/EFL)

Composition of Professional Standards



Source: National Professional Standards for Teachers in Pakistan (2009), Policy & Planning Wing, Ministry of Federal Education & Professional Training



ANNEX - VI

Standards for Model Assessment Framework (MAF) 24 in Pakistan

STANDARD 1	Curriculum, SLO based Assessment & mapping
STANDARD 2	Coverage of Bloom's Taxonomy (Knowledge, Attitude, Skills)
STANDARD 3	Content Coverage - Table of Specification
STANDARD 4	Question Paper Pattern (MCQs, SRQs, ERQs ATP)
STANDARD 5	Capacity Building of Assessment Staff
STANDARD 6	Quality of Test (Validity, Reliability)
STANDARD 7	Marking Criteria/ Rubrics
STANDARD 8	Grading GPA
STANDARD 9	Result Analysis
STANDARD 10	Feedback for the Stakeholders
STANDARD 11	Digitisation

Source: Model Assessment Framework 24, For Grades 9-12, Inter Boards Coordination Commission (IBCC), Ministry of Federal Education & Professional Training

BIBLIOGRAPHY

1. Pakistan Education Statistics (PES) Reports, Pakistan Institute of Education (PIE), MoFEPT
2. National Achievement Test (NAT), Pakistan Institute of Education (PIE), MoFEPT
3. Annual Status of Education Report (ASER), Idara-e-Taleem-o-Agahi (ITA), Pakistan
4. National Education Policy 2009, Ministry of Education
5. National Education Policy Framework, 2018. MoFEPT
6. Technical and Vocational Education and Training (TVET) Policy for Pakistan, MoFEPT
7. Federal Foundational Learning Policy 2024, MoFEPT
8. National “Skills for All” Strategy, 2018. MoFEPT
9. National Qualification Framework of Pakistan (2015), Higher Education Commission of Pakistan
10. National Professional Standards for Teachers in Pakistan (2009), Policy & Planning Wing, Ministry of Education
11. National Professional Standards for Assessment in Pakistan, Inter Board Coordination Commission (IBCC), Pakistan
12. Learning Poverty Brief (2022), World Bank
13. School Education Sector Plan and Roadmap for Sindh (2019-2024)
14. Punjab Education Sector Plan, 2019-20 to 2023-24
15. Balochistan Education Sector Plan, 2020-25
16. Education Sector Plan, 2020-25, KP
17. Pakistan’s Education Sector Plans: A Comparative Analysis of Gender, Inclusion, & Resilience in the System, 2023. Society for Access to Quality Education (SAQE)
18. Annual Status of Education Report (ASER) 2023
19. National Curriculum of Pakistan, 2022-23. National Curriculum Council (NCC)
20. Human Development Report 2023-24, World Bank
21. National Vocational Qualifications Framework (NVQF) Regulations, 2024
22. School Language Policy in Balochistan. UNICEF 2023

