

INCLUSIVE EDUCATION AND RELEVANCE

**for
10th E-9 Ministerial Review Meeting**

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ACRONYMS

AJK	Azad Jammu & Kashmir
BEC	Balochistan Education Commission
BIMDTC	Balochistan Instructional Material Development & Training Cell
BISEs	Board of Intermediate & Secondary Education
BOC & EC	Bureau of Curriculum and Extension Centre
BOC	Bureau of Curriculum
BTBB	Balochistan Text Book Board
CIDA	Canadian International Development Agency
CIF	Curriculum Implementation Framework
CT	Certificate in Teaching
DCTE	Directorate of Curriculum and Teacher Education
DFID	Department for International Development
DSD	Directorate of Staff Development
DTESSC	District Training Education Support Centre
E & SED	Elementary and Secondary Education Department
EFA	Education For All
ESR	Education Sector Reforms
FATA	Federally Administered Tribal Areas
FWC	Family Welfare Centers
GATTTTC	Government Agro Technical Teacher Training Center
GB	Gilgit Baltistan
GCPE	Government College for Physical Education
GDP	Gross Domestic Product

GPI	Gender Parity Index
ICT	Information Communication Technology
IER	Institute of Educational Research
KP	Khyber Pakhtunkhwa
MDG	Millennium Development Goal
NEAS	National Education Assessment System
NEC	National Education Census
NEEC	National Education Equipment Center
NERP	National Education Policy Reforms Process
NICT	National Information and Communication Technology
NOC	No Objection Certificate
PCA	Punjab Curriculum Authority
PEAC	Provincial Education Assessment Center
PEAS	Provincial Education Assessment System
PEC	Punjab Examination Commission
PETT	Primary English Teacher Training
PITB	Punjab Information Technology Board
PITE	Provincial Institute of Teacher Education
PRP	Provincial Reform Program
PSDP	Public Sector Development Program
PTC	Primary Teaching Certificate
PWDs	Persons with Disabilities
RITE	Regional Institutes of Teacher Education
RSU	Reform Support Unit
SESP	Sindh Education Sector Plan
SLOs	Student Learning Outcomes

SSC	Secondary School Certificate
STBB	Sindh Textbook Board
STEDA	Sindh Teacher Education Development Authority
SW & WD	Social Welfare & Women Development Department
TBB	Text Book Board
TIP	Technical Implementation Unit
TPD	Teacher Professional Development
UNESCO	United Nations Educational, Scientific and Cultural Organization
UNICEF	United Nations International Children's Emergency Fund
USAID	United States Agency for International Development
USB	Urdu Science Board

Message from the Minister of State
Ministry of Federal Education and Professional Training

Islamic Republic of Pakistan, being signatory of various International Declarations like Declaration of Human Rights, Jomtien Convention and Dakar Frame-Work of Action, is striving her best to come up to the expectations of the international community with regard to achievement of Millennium Development Goals and Education For All (EFA) Goals. With this spirit Pakistan has formulated its Education Sector Reforms 2001-2004, National Education Policy 2009 and National Plan of Action 2013-16 to accelerate our efforts in achieving MDGs targets. Pakistan appreciates the efforts of the international community in general and E-9 Countries Forum in particular for vigorously persuing to ensure that the international commitments are achieved within minimum possible time.

Pakistan has prepared its reports as per decision made during the 9th E-9 Educational Conference Review Meeting convened on November, 2012 on the five selected themes namely i) Curriculum Reform and Development of Teaching Learning Material; ii) Strategies for Making Schools Inclusive; iii) Professional Development of Teachers to Impact Learning for All; iv) Use of ICT for Enhanced Access and Learning; and, v) Develop Institutional Capacities for Assessing Learning Out-comes. The report indicates substantial progress in achieving the targets of EFA and MDGs, however, efforts are also being made to keep abreast with the international standards. Government of Pakistan is committed to achieve the targets as per international commitments. I hope that in the coming years, accelerated efforts would be made to provide access to education, improve its quality, reduce gender disparity and dropouts.

I would like to convey my intense appreciations to the members of Research Wing of Academy of Educational Planning and Management for preparing the afore-quoted report which provides very valuable information.

Eng. Muhammad Baligh-ur-Rehman
Minister of State, Ministry of Federal Education and
Professional Training, Islamabad

Message from the Secretary
Ministry of Federal Education and Professional Training

Pakistan is amongst the most populous nine countries which has the large out of school children at primary level of education. Ministry of Federal Education and Professional Training, Government of Pakistan coordinated with the Provinces and Regions of the country to gauge the level of achievement in respect of the five themes namely i) Curriculum Reform and Development of Teaching Learning Material; ii) Strategies for Making Schools Inclusive; iii) Professional Development of Teachers to Impact Learning for All; iv) Use of ICT for Enhanced Access and Learning; and, v) Develop Institutional Capacities for Assessing Learning Out-comes marked by the E-9 countries forum in its meeting held in November, 2012 in New Delhi, India.

The Ministry directed one of its professional institutions namely Academy of Educational Planning and Management (AEPAM), Islamabad to carry out the assignment. I am glad to mention that the research team of AEPAM has made every possible effort to make the document useful for the honorable E-9 forum by producing a compendium of five reports based on facts and figures collected and compiled in AEPAM through a number of consultative meetings with the stakeholders across the country.

The report is very objective and depicts the real ground realities. It will be our endeavor to remove deficiencies vis-à-vis the five marked thematic areas and Government of Pakistan will take necessary steps with the close coordination and cooperation of the Provinces and Regions of the country to accomplish the task.

Muhammad Ahsan Raja
Secretary,
Ministry of Federal Education and
Professional Training, Islamabad.

ACKNOWLEDGEMENT

Islamic Republic of Pakistan like many other developing countries is facing myriad challenges to improve access, equity, quality and good governance in education sector. Education plays a vital role in the socio-economic development of a country. Pakistan is a member of E-9 forum. The 10th E-9 conference will be held in Islamabad, Pakistan in November 2014. Each member of E-9 forum will present its report on five selected thematic areas in this conference. Pakistan will also present its report on these five thematic areas:

- i) Curriculum reform and development of teaching learning material.
- ii) Strategies for making schools inclusive.
- iii) Professional development of teachers to impact learning for all.
- iv) Use of ICTs for enhanced access and learning.
- v) Develop institutional capacities for assessing learning outcomes.

This report will provide useful information regarding Pakistan's Progress in the above thematic areas. On behalf of AEPAM colleagues, it is my pleasant duty to thank Engineer Mian Muhammad Baligh-ur-Rehman, Minister of the State and Mr. Muhammad Ahsan Raja, Secretary, Ministry of Federal Education and Professional Training, Government of Pakistan, Islamabad for their continuous guidance, support and encouragement. I would like to express my gratitude to research team comprising Dr. Dawood Shah, Director (Training), Syed Muhammad Saqlain, Director (Research), Mr. Muhammad Hanif, Joint Director, Dr. Khawaja Sabir Hussain, Deputy Director (Research) and Ms. Shaista Bano, Deputy Director (Research) for conducting the study.

I am sanguine that working with resilience and in unison will bear the dividends for all of us as a nation. May God continue blessing us.

Dr. Allah Bakhsh Malik PhD, PAS
UNESCO Confucius Laureate
Director General, AEPAM

EXECUTIVE SUMMARY

This study has been designed to serve as a comprehensive country report on five thematic areas (i) Curriculum reform and development of teaching learning material; (ii) Strategies for making schools inclusive; (iii) Professional development of teachers; (iv) Use of ICT for enhanced access and learning and (v) Developing institutional capacities for assessing learning outcomes. In this context, research teams of AEPAM visited provincial headquarters, i.e. Peshawar, Karachi, Quetta, and Lahore to collect relevant information. The research team conducted focus group discussions with heads of relevant departments to get the required information. On the basis of information collected from these field visits, this report was developed.

The E-9 forum was launched in 1993 at the EFA summit of the nine highly populated countries in New Delhi, India. The E-9 is a forum of nine highly populated countries to achieve EFA goals. The “E” stands for Education and the “9” represents the nine highly populated countries of the World namely, Pakistan, Bangladesh, Brazil, China, Egypt, India, Indonesia, Mexico and Nigeria. E-9 countries have over half of the world’s population, more than 70% of the world’s illiterates and 42% of the world’s out of school children. The Ninth E-9 Ministerial Review Meeting was held in New Delhi, India on 8-10 November 2012. The event discussed in this meeting was, the challenges of improving education quality; and Inclusive, Relevant and Quality Education for all. They decided to work together on the following thematic areas:-

1. Curriculum reform and development of teaching learning material
2. Strategies for making schools inclusive
3. Professional development of teachers to impact learning for all
4. Use of ICT for enhanced access and learning
5. Developing institutional capacities for assessing learning outcomes

It was decided in the 9th meeting of E-9 countries that the 10th E-9 Ministerial Review Meeting will be held in November 2014 in Islamabad, Pakistan.

The summary of Pakistan Country Report on the above Thematic Areas is given below:-

Thematic Area 1: Curriculum Reform and Development of Teaching Learning Material

Pre 18th Constitutional Amendments Scenario: It was found that all provinces adopted national curriculum 2006. As per 1973 Constitution, education remained on Concurrent List i-e., curriculum, syllabus, planning, policy, centers of excellence and standards of education. According to the Constitution of Pakistan 1973 and Act 1976, Federal Government was responsible to develop National Curriculum from grades I-XII including ECE in consultation with provincial governments.

Key Features of National Curriculum 2006: The key features of National Curriculum 2006 include (i) standards and competencies driven, (ii) learning objectives correspond to students' learning outcomes (SLOs), (iii) progressive approaches for primary, middle, secondary and tertiary stages of learning, (iv) life skills are integrated across subjects, (v) focus on promoting creative writing and analytical thinking for learners rather than rote learning and (vi) detailed guidelines were provided in the curriculum for textbook writers and teachers for delivery of the curriculum effectively.

Post 18th Constitutional Amendments Scenario:

- (i) Key changes were introduced in education by 18th Constitutional Amendment,
- (ii) In terms of education governance the 18th Constitutional Amendment Act 2010 has reconfigured the federal and provincial relationship,
- (iii) Free and Compulsory Education- Introduction of Article 25-A, and
- (iv) Abolishment of the Concurrent Legislative List. All subjects contained in concurrent list were devolved to the provinces.

Inter-Provincial Comparison regarding Curriculum Reforms:

Punjab: Punjab has adopted National Curriculum 2006. All textbooks from grade I-X except for grade VIII have been developed and published as per National Curriculum 2006. Teacher's Guide for Primary Classes has been developed by Directorate of Staff Development. Lesson Plans for Primary Classes have also been developed for Primary school teachers.

Sindh: Sindh has adopted National Curriculum 2006. Textbooks for Grade I-IV have been developed and published. Work is in progress on remaining textbooks. Some changes have been incorporated in Social Studies by introducing local heroes and culture in the text. No changes have been made in other subjects.

Khyber Pakhtunkhwa: Khyber Pakhtunkhwa has adopted National Curriculum 2006. All textbooks have been developed and published following National Curriculum 2006. However, some changes have been incorporated in Social Studies by incorporating lessons on local heroes and culture. No changes have been made in other subjects.

Balochistan: Balochistan has also adopted National Curriculum 2006. Balochistan has published six Textbooks in phase-I in 2012 and 15 Textbooks in phase-II in 2013. Balochistan Text Book Board has also published Math for ECE. Balochistan Text Book Board will publish 20 Textbooks in 2014.

Thematic Area 2: Strategies for Making Schools Inclusive

Inclusive education is commonly associated with the education of children with mild disabilities and special educational needs in mainstream schools. Government is committed to providing quality education and has taken the following steps: (i) All Provincial and Federal governments signed a national document called "Islamabad Declaration on Inclusive Education" on April 27, 2005 (ii) National Education Policy 2009 proposed, "to equalize access to education through provision of basic facilities for girls and boys alike, under-privileged/marginalized groups and special children and adults".

Inter-Provincial Comparison regarding Inclusive Education:

Mildly disabled children are admitted in all formal public schools in all provinces including Islamabad. All heads of public schools have been directed not to refuse admission to any mildly disabled child. In Punjab and Islamabad, training is being provided to formal school teachers for teaching mildly disabled children.

Thematic Area 3: Professional Development of Teachers to Impact Learning For All

National Education Policies and reforms have been introduced for Professional Development of teachers since 1947. National Education Policy, 2009 proposed the following actions: (i) Minimum required Professional Qualification for Elementary School Teachers is Bachelor of Education (B.Ed) (ii) PTC and CT courses have been abolished. Working PTC and CT Teachers have been directed to improve their professional qualification up to B.Ed, (iii) Teacher Education curriculum has been adjusted as per National Curriculum 2006, (iv) A separate cadre of specialized teacher trainers shall be developed and (v) Government shall ensure that teachers are provided Professional Development through a three-year cycle basis.

Inter-Provincial Comparison regarding Professional Development of Teachers: All provinces have adopted similar policy for pre- service and in-service teacher training.

Punjab: Directorate of Staff Development has started regular In-Service Training Programs for Primary/Elementary Teachers. Directorate of Staff Development prepared teacher guides and lesson plan manuals of language and science subjects for Primary Teachers.

Sindh: Provincial Institute of Teacher Education, Reform Support Unit and Bureau of Curriculum have been providing in-service training to the teachers.

Balochistan: Provincial Institute of Teacher Education provides in-service teacher training.

Khyber Pakhtunkhwa: Provincial Institute of Teacher Education and Regional Institute of Teacher Education provide in-service training to the teachers.

Thematic Area 4: Use of ICT for enhanced Access and Learning

National Education Policy, 2009 has focused on the Use of ICT in Education. It encouraged that ICTs should be utilized creatively to provide access to teachers and students with a wide range of abilities and from varied socio-economic backgrounds. ICTs shall be used to strengthen the quality of teaching and educational management.

Inter-Provincial Comparison regarding Use of ICT: Punjab Department of Education is encouraging use of Information Technology for enhanced access and learning. Punjab Information Technology Board has launched a special project namely 'e learning'. As a first step, digitized versions of textbooks of Biology, Physics and Chemistry for 9th and 10th grades and Science and Mathematics of middle classes have been developed and uploaded on website (<http://elearn.punjab.gov.pk>): Except Balochistan all provinces have declared Computer Sciences as a compulsory subject at elementary level i.e. in grades 6, 7 and 8 and as optional subject at Secondary level. Computer labs with IT teachers have been established in Secondary Schools in Punjab and Sindh. In collaboration with Canadian International Development Agency, 37 computer labs have been established in teacher training institutes in Sindh.

Thematic Area 5: Development of Institutional Capacities for assessing learning out-comes

Assessment is the process of identifying, gathering and interpretation of information about students' learning. The central purpose of assessment is to provide information on student's achievement and progress and set the direction for ongoing teaching and learning process. Examinations and assessments are an integral part of pedagogy which determines the destiny of students and learning for their life career.

Inter-Provincial Comparison regarding Assessment of Learning Outcomes: (i) From grade I-VIII; every school has its own mechanism of evaluation of the students such as periodical examination/first term/ second term and third term for promotion of the students to next higher grade all

over the country. All Boards of Intermediate and Secondary Education are responsible to conduct examination for grades 9-12. In Punjab, 5th and 8th class annual examination are conducted by Punjab Examination Commission. In Islamabad Capital Territory (ICT) 5th and 8th class annual examination are conducted as centralized examination by Federal Directorate of Education. Training is also provided to paper setters and examiners in Punjab.

Conclusions

- i) All provinces including Islamabad Capital Territory have adopted National Curriculum 2006.
- ii) Punjab and Khyber Pakhtunkhwa have developed all textbooks as per National Curriculum 2006. Sindh has developed textbooks for classes I-IV and they are working on other textbooks. Balochistan has developed 40 books as per National Curriculum, 2006.
- iii) Almost all schools in all provinces including Islamabad Capital Territory allowed admission to mildly disabled children along with normal children in formal public schools.
- iv) Professional qualification for elementary teachers has been enhanced from Primary Teaching Certificate (PTC)/Certificate of Teaching (CT) to Bachelor in Education (B.Ed.) in all provinces.
- v) In-service teacher training has been arranged in all provinces.
- vi) Use of ICT is found in almost all schools of all provinces except Baluchistan. Computer labs with IT teacher have been established in all secondary schools in Punjab and Sindh. Computer Science has been declared as a compulsory subject from 6th to 8th and optional from 9th onwards in all provinces except in Balochistan.

- vii) Some changes in Social Studies textbooks have been introduced in Sindh and Khyber Pakhtunkhwa to incorporate lessons about local heroes and cultural values.
- viii) Assessment of grade I-VIII is done by respective schools, and from 9th to 12th examinations are conducted by Boards of Intermediate and Secondary Education. However, in Punjab and Islamabad examinations of 5th and 8th classes are conducted by Punjab Examination Commission and Federal Directorate of Education respectively.

INTRODUCTION: ISLAMIC REPUBLIC OF PAKISTAN

The Islamic Republic of Pakistan emerged as an independent state on the map of the world on 14 August, 1947. The total area is about 796,095 sq. kilometers. Pakistan has a 1,046-kilometre (650 mi) coastline along the Arabian Sea and the Gulf of Oman in the south and is bordered by India to the east, Afghanistan to the west and north, Iran to the southwest and China in the far northeast. It is separated from Tajikistan by Afghanistan's narrow Wakhan Corridor in the north, and also shares a marine border with Oman. Pakistan comprises four provinces: Punjab, Balochistan, Sindh and Khyber Pakhtunkhwa and four regions: Federally Administered Tribal Areas (FATA), Gilgit Baltistan, Azad Jammu & Kashmir and Islamabad capital territory. Islamabad is the capital of Pakistan and all provinces and regions have their own headquarters. Pakistan has a federal form of government. Its provinces have their own provincial governments. Pakistan has a National Assembly and a Senate at Federal level and Provincial Assemblies in provinces. The President of Islamic Republic of Pakistan is the head of the state and the Prime Minister is the chief executive. Each province has its own Governor and Chief Minister to run the provincial governments.

Population, Language and Religion

Pakistan is sixth most populous country in the world with an estimated population of 184.35 million in 2013. The rate of growth of population during 2012-2013 was 2%. Government is making efforts to control the population growth through various population welfare programs and by creating awareness among people. In this regard, the population welfare program established 2891 Family Welfare Centers (FWC), 340

reproductive health centers and 292 mobile service units during 2011-12. These population welfare programs are contributing significantly in controlling rate of population growth, fertility rate, infant mortality rate and maternal mortality rate.

The national language of Pakistan is Urdu whereas English is the official language. Provinces have their own local languages. Punjabi and Saraiki are mainly spoken in the province of Punjab, Sindhi is mainly spoken in the province of Sindh, Pashtu is mainly spoken in Khyber Pakhtunkhwa and Balochi and Pashto are mainly spoken in Balochistan. There are also other minor local languages and dialects. The state religion of Pakistan is Islam, which is practised by about 95-98% of the population. The remaining 2-5% practice Christianity, Hinduism, Sikhism and other religions.

Culture, Customs and Traditions

From ancient times, the lands comprising Pakistan formed a melting pot for various cultures and civilizations. It was home to Mehrgarh civilization in Balochistan, Moenjodaro in Sindh, Harappa in Punjab, and Gandhara civilization that flourished in Khyber Pukhtunkhwa and Taxila. With the advent of Muslims in 8th century the life and culture of the region became more and more Muslim. The customs and traditions derived mainly from the successive Muslim dynasties that ruled the region. As such, there is great cultural homogeneity despite linguistic diversity.

It is a land of physical and ‘individual diversity’, but cultural homogeneity. ‘There is the hardiness and endurance of the desert dwellers, the stalwart humility of the mountain people, the skills and ingenuity of those who have made their homes, generations after generations, in the fertile plains and valleys and who have founded great cities, (as well as) the restless energies of those inhabiting the highland steppes’. While the topography differs from region to region, the customs and traditions are remarkably similar in content and presentation. The tradition of hospitality is the commonest and people all over the country are extremely hospitable. The traditional dress of the people of Pakistan is *shalwar – kameez* with men wearing sober colors and women printed cloth. Men cover their heads with turbans or caps while women use *chadar* or *dopatta*. In urban areas,

western dresses have also become popular. The main food in all the regions of Pakistan remains meat eaten with bread. Meat is cooked in many different ways especially in the urban centers. Many of the meat dishes are similar to the Turkish meat dishes and carry the same names, such as *kebab*, *kofta*, *dolma* etc. If a host doesn't serve meat and chicken dishes to his guests, he is considered discourteous.

The customs, culture and traditions of the people of a country are representative of the history, faith, language and environment of that country. The cultural patterns of Pakistan speak of our rich cultural heritage and traditions. Islam has played a pivotal role in shaping cultural life and has provided a pattern for molding lives according to the prescribed ways. The majority of people of Pakistan are followers of Islam and Islamic traditions

Life Expectancy

From year 2002, the life expectancy has jumped up to 63 years of age. The improvement was a direct result of improved medical facilities and better educated health professionals available in the country.

Agriculture and Industries

Agriculture plays an important role directly and indirectly in generating economic growth. It provides food to consumers and fibers for domestic industry. It is a source of scarce foreign exchange earnings and provides market for industrial goods. Agriculture has strong backward and forward linkages with industry as it is the largest purchaser of farm inputs such as chemicals, fertilizers and machinery and supplies raw material to textile and food processing industry.

A major part of the economy depends on farming through production, processing and distribution of major agricultural commodities. About 65% of population of Pakistan lives in villages and is dependent on agriculture formally or informally. It employs about 45% of the labor force and contributes 57% in total export earnings. It accounts for more than 22% of the Gross Domestic Product (GDP) and provides raw material to major industries such as textile and sugar. Pakistan is blessed with a variety of

climatic and geographic regimes which are suitable to grow almost all kinds of food, fiber and cash crops including fruits and vegetables. Wheat and rice are the main staple food crops while cotton and sugarcane are the main cash/industrial crops and the economy of the country is largely dependent on them.

The major crops include wheat, rice, maize, millets, sorghum, sugarcane, pulses, cotton and oil seeds. Pakistan is home to the aromatic long grain 'Basmati rice' grown in the plains of north Punjab. Some of the best varieties of fruits grown in Pakistan include mango, orange, apple, peach, plum, apricot, cherry, grape, pear, pomegranate, guava, melon and palm date. A wide variety of vegetables are also grown in Pakistan.

Pakistan's industrial sector accounts for about 24% of GDP. Cotton textile production and apparel manufacturing are Pakistan's largest industries, accounting for about 66% of the merchandise exports and almost 40% of the employed labor force. Cotton and cotton-based products account for 61% of export earnings of Pakistan. Other major industries include cement, fertilizer, edible oil, sugar, steel, tobacco, chemicals, machinery and food processing.

Labor Force and Employment

According to the Labor Force Survey 2010-2011, Pakistan has a labor force of 57.24 million people which is 0.91million more than the previous year. Out of this, total number of people employed during 2010-11 was 53.84 million. Most of the labor force in Pakistan works in the rural areas where agriculture is the dominant activity.

Unemployment is the major problem of the country. The rate of unemployment has increased to 6.0% in 2010-11. Unemployment in rural area has decreased from 4.8% in 2009-10 to 4.7% in 2010-11 while in urban area the unemployment has increased from 7.2% in 2009-10 to 8.8% in 2010-2011.

Tourism in Pakistan

The country's attraction ranges from the ruins of the Indus Valley Civilization such as Mohenjo-daro, Harappa and Taxila, to the Himalayan hill stations, which attract those interested in winter sports. Pakistan is home to several mountain peaks over 8000 m including world's second highest (K2), which attract adventure seekers and mountaineers from around the world. The north of Pakistan has many old fortresses, ancient architecture and the Hunza and Chitral valleys which are home to small pre- Islamic animist Kalash community.

Nuclear Energy

Pakistan is the first Muslim country in the world to construct and operate civil nuclear power plants. The Pakistan Atomic Energy Commission, the scientific and nuclear governmental agency is solely responsible for operating these power plants. Pakistan generates 3.6% of electricity from these power plants compared to 62% from fossil fuel, 0.3% from coal and 33 % from hydroelectric power.

Education

Education is the back-bone of every society, and children are considered the human resource of the future. Without access to education, it is impossible to produce quality human resource for the future. The value of education for children is priceless. Schooling, especially literacy, stimulates cognitive, emotional, and social development and empowers children. A well educated child can avail better opportunities in every walk of life. According to Article 26 (1) of the Universal Declaration of Human Rights, everyone has the right to education. Goal 2 of MDGs focuses on achieving universal primary education, while Target 2A promises that by 2015, children everywhere, boys and girls alike, will be able to complete a full course of primary schooling. Goal 2 of MDG further focuses on Enrollment in primary education, and completion of primary education (grade 1-5).

Schooling in Pakistan

Education in Pakistan has five distinct stages, namely, Pre-Primary stage which is an important component of Early Childhood Education (ECE) and contributes towards the development of a child between the ages of 3-5 years, Primary stage which is of 5 years (Classes I to V) and it focuses on basic mathematical and literacy skills, appreciation of traditions and values, and socialization, Middle stage which is of 3 years (Classes VI to VIII) which strengthens foundations of first and second languages, mathematics and science and developing understanding of family, community, environment, health and nutrition, Secondary stage consisting of 2 years (Classes IX-X). Streaming of children starts at this stage and students opt for a group of their choice such as Science, Humanities and Technical and Higher Secondary stage which also consist of 2 years (Classes XI-XII) and prepare children for specialized courses in tertiary education.

There are currently 255,044 education institutions in the country. The overall enrolment is 41.822 million with teaching staff of 1.599 million. Out of total institutions, 175,695 (69%) are in public sector catering to 26.46 (63%) million enrolled students and 860,315 (53%) teaching staff. In case of private sector, there are 79,349 (31%) institutions catering 15.36 million students (37%) and 738,933 (47%) teaching staff. As far as distribution of education institutions by level is concerned, 57% institutions are primary, 17% institutions are middle (lower secondary) and 12% institutions are secondary. There is a great difference in enrolment of students by gender. From pre-primary up to college level about 57% male students are enrolled as compared to 43% female students. At primary level the boy's enrolment accounts for 56% as compared to 44% girl's enrolment. The gender parity index at primary level is 0.86. The share of boy's enrolment at middle level comes to 57% whereas girl's enrolment is 43%. Similarly at secondary level, the share of boy's enrolment is 58% and girl's enrolment accounts for 42%. The overall education system (up-to degree colleges) is served by 44% of male teachers and 56% of female teachers.

In Pakistan, out of the total primary-aged (5-9 years) child population, 68% are enrolled in primary school whereas the remaining 32% are out of school. However, wide variance is observed across provinces, gender and location. The highest net primary enrolment rate is in Punjab 88%, followed by Khyber Pakhtunkhwa 81% Sindh 79% and Islamabad Capital Territory 70%; Gilgit Baltistan 63%; Federally Administered Tribal Areas 60%; Azad Jammu & Kashmir 58% and Balochistan 51%. The overall Gender Parity Index (GPI) for primary education is 0.86, ranging between 1.06 in ICT to 0.47 in FATA.

The net enrolment rate at secondary level is 28%, for male it is 32% and female it is 24%. The Gender Parity Index at secondary level is 0.75. The transition rate from primary to secondary education for both sexes is 78%, it is 78% for male and 76% for female.

Literacy

The average increase in literacy rate from 1981 to 1998 (inter-consensus period) had been 1.1%. Growth in literacy rate has been around 2% per annum after 1998. According to Pakistan Economic Survey, 2013-14 literacy rate is one of the important indicators of education as its improvement is likely to have a long run impact on other important indicators of national welfare. According to the latest Pakistan Social and Living Standards Measurement (PSLM) Survey 2012-13, the literacy rate of the population (10 years and above) is 60 percent as compared to 58 percent in 2011-12. Literacy is higher in urban areas than in rural areas and much higher among male. Province wise data indicates that Punjab leads with 62 percent followed by Sindh with 60 percent, Khyber Pakhtunkhwa with 52 percent and Balochistan with 44 percent.

Current Situation of Primary Education in Pakistan

Table 1: Access to Education

	2012-13			
		Total	Male	Female
Out of School Children	Out of School Children (Primary)	6,752,565	2,963,471	3,789,094
	Out of School Children (Secondary)	20,698,977	10,148,405	10,550,572
Enrollments	Stage	Total		
		Boys	Girls	Total
	Primary	9,832,303	7,742,546	17,574,849
Drop-out rate	Primary % Total Dropout	33.2%		
	Primary % Male Dropout	33.5%		
	Primary % Female Dropout	32.9%		
Access to education/ school		Total	Male	Female
	GIR (Primary)	103.9 %	110.2%	97.0%
	NIR (Primary)	82.8%	88.0%	77.2%
	GER (Primary)	85.9%	91.8%	79.4%
	NER (Primary)	68.5%	73.4%	63.2%
	ANER (Primary)	68.5%	73.4%	63.2%
	GER (Secondary)	35.3%	40.1%	30.1%
	NER (Secondary)	28.2%	32.1%	24.0%

Source: NEMIS, AEPAM, Islamabad

Condition of the Educational Infrastructure including Missing Facilities

Table 2: Missing Facilities

Building Ownership (Primary Level)	Total					
	Male	%	Female	%	Total	%
Govt. Building	63,315	81	38,548	85	101,863	82
Rented	335	0	503	1	838	1
Donated	1,620	2	841	2	2,461	2
Rent Free	471	1	268	1	739	1
Other Building	5,892	8	2,246	5	8,138	7
No Building	5,143	7	2,395	5	7,538	6
Not Reported	1,001	1	520	1	1,521	1
Total	77,777	100	45,321	100	123,098	100
Building Condition (Primary Level)	Total					
	Male	%	Female	%	Total	%
Satisfactory	34,747	46	25,195	55	59,942	49
Need Repair	25,357	33	11,684	27	37,041	30
Dangerous	9,502	12	4,194	9	13,696	11
No Building	5,611	7	2,588	6	8,199	7
Not Reported	1,772	2	1,284	3	3,056	3
Total	76,989	100	44,945	100	121,934	100
Construction Type (Primary Level)	Total					
	Male	%	Female	%	Total	%
Kacha	4,073	5	2,150	5	6,223	5
Paka	61,935	81	38,091	85	100,026	82
Mix	3,670	5	1,095	2	4,765	4
No Building	5,627	7	2,595	6	8,222	7
Not Reported	1,685	2	1,013	2	2,698	2
Total	76,990	100	44,944	100	121,934	100

Building Availability (Primary Level)	Total					
	Male	%	Female	%	Total	%
Available	69,850	91	41,711	93	111,561	91
Not Available	7,007	9	3,147	7	10,154	9
Not Reported	132	0	87	0	219	0
Total	76,989	100	44,945	100	121,934	100
Boundary Wall (Primary Level)	Total					
	Male	%	Female	%	Total	%
Available	45,028	59	36,467	81	81,495	67
Not Available	30,368	39	7,611	17	37,979	31
Not Reported	1,594	2	866	2	2,460	2
Total	76,990	100	44,944	100	121,934	100
Water Availability (Primary Level)	Total					
	Male	%	Female	%	Total	%
Available	48,199	63	31,618	71	79,817	66
Not Available	27,811	36	12,721	28	40,532	33
Not Reported	980	1	605	1	1,585	1
Total	76,990	100	44,944	100	121,934	100
Latrine Availability (Primary Level)	Total					
	Male	%	Female	%	Total	%
Available	41,716	54	30,598	68	72,314	59
Not Available	34,556	45	13,950	31	48,506	40
Not Reported	718	1	369	1	1,114	1
Total	76,990	100	44,944	100	121,934	100
Electricity Availability (Primary Level)	Total					
	Male	%	Female	%	Total	%
Available	35,708	47	25,210	56	60,918	50
Not Available	38,052	49	18,651	42	56,703	46
Not Reported	3,230	4	1,083	2	4,313	4
Total	76,990	100	44,944	100	121,934	100

Source: NEMIS, AEPAM, Islamabad

Education total Budgetary Allocations and Expenditure (Rs m)

Table 3: Allocations and Expenditure

Area	2009-10			2010-11			2011-12		
	Budget	Actual	% Utiliz	Budget	Actual	% Utiliz.	Budget	Actual	% Utiliz
Punjab	127804.5	106033.1	83.00	164462.3	140161.6	85.20	183042.8	166829.9	91.10
Sindh	71949.0	52870.3	73.50	78704.1	72394.7	92.00	73886.9	47213.0	63.90
Khyber Pakhtunkhwa	39495.0	39138.3	99.10	47720.4	51030.4	106.90	58248.2	67381.2	115.70
Balochistan	4055.8	7380.1	18.00	18986.6	19408.5	102.20	21745.9	23981.1	110.30
Federal	62536.4	48481.5	77.50	55665.7	60487.8	108.70	53512.5	48150.7	90.00
National	305840.8	253903.5	83.00	365539.1	343483.0	94.00	390436.3	353555.9	90.60

* Actual: Total actual education expenditures of provincial and district levels.

** Estimated

Source1: Office of the Controller General, Accounts (CGA), 2012, Government of Pakistan.

Source2: National Plan of Action to Accelerate Education-Related MDGs 2013-16 – Achieving Universal Quality Primary Education in Pakistan. 2013.(p.17).

Table 4: Education Expenditure as a percentage of GDP

2001-02	2009-10	2012-13
1.5	1.7	2.1

During the past decade, Pakistan's education expenditure as percentage of GDP varied between 1.5% and 2.1%.

Chapter Two

BACKGROUND OF E-9 COUNTRIES, MINISTERIAL MEETING AND THE SELECTION OF THEMES

The E-9 forum was launched in 1993 at the EFA summit of the nine highly populated countries in New Delhi, India. It was formed to achieve EFA goals. The E stands for Education and the 9 represents the nine highly populated countries of the World namely Pakistan, Bangladesh, Brazil, China, Egypt, India, Indonesia, Mexico and Nigeria. E-9 countries have over half of the World's population, more than 70 % of the World's illiterates and 42 % of the World's out of school children. Since 1993 the Ministers of Education from the E-9 countries have held nine Ministerial Review Meetings to debate selected themes of common interest to achieve EFA goals.

The first E-9 Ministerial Review Meeting was held in Bali, Indonesia in September 1995. The theme of the meeting was: From Delhi to Bali. Second E-9 Ministerial Review Meeting was held in Islamabad, Pakistan in September 1997. The event discussed in this meeting was: Social and political mobilization in E-9 countries. Third E-9 Ministerial Review Meeting was held in Recife, Brazil in January 2000. The event discussed in this meeting was: E-9 countries 2000 EFA assessments; new avenues for action. Fourth E-9 Ministerial Review Meeting was held in Beijing, China in August 2001. The event discussed in this meeting was: the role and use of distance education and information technologies in basic education. Fifth E-9 Ministerial Review Meeting was held in Cairo, Egypt in December 2003. The event discussed in this meeting was: early childhood care and education.

The Sixth E-9 Ministerial Review Meeting was held in Monterrey, Mexico in February 2006. The event discussed in this meeting was: assessment of quality in education. The Seventh E-9 Ministerial Review Meeting was held in Bali, Indonesia in March 2008. The event discussed in this meeting was: improvement of teacher education and training as a focus of educational system reform. The Eight E-9 Ministerial Review Meeting was held in Abuja, Nigeria in June 2010. The event discussed in this meeting was: literacy for development. The Ninth E-9 Ministerial Review Meeting was held in New Delhi, India on 9-10 November 2012. The event discussed in this meeting was: the challenges of improving education quality; Inclusive, Relevant and Quality Education for all. The review meeting of Ministers of Education and heads of delegation of the E-9 countries ended with the adoption of the Delhi Commitment.

The 3-days meeting took stock of the progress towards the Education for All (EFA) goals and to renew cooperation in consolidating the gains and addressing remaining challenges. The member states reaffirmed the central role of education in all development endeavors and in promoting peace and social cohesion. They decided to work together on the following issues:-

1. Curriculum reform and development of teaching learning material
2. Strategies for making schools inclusive
3. Professional development of teachers to impact learning for all
4. Use of ICT for enhanced access and learning
5. Development of institutional capacities for assessing learning out-comes

In addition to these regular E-9 Ministerial Review Meetings, the E-9 Countries Ministers meet and hold dialog whenever there is an opportunity; such as during the annual EFA meetings and during sessions of UNESCO's General Conferences. While the E-9 countries have ownership over activities pledged during the Ministerial Review Meetings, the rotational E-9 chair along with UNESCO secretariat takes leadership of coordination. UNESCO provides technical support and helps the E-9 countries.

The Tenth E-9 Ministerial Review Meeting will be held in Islamabad, Pakistan in November 2014. Pakistan will chair the Tenth E-9 Ministerial Review Meeting. Each member country was required to furnish its Country Report on each of the above referred themes in the Tenth E-9 Ministerial Meeting to be held in November, 2014 in Islamabad, Pakistan. In this perspective Pakistan has prepared her theme-wise reports which follow on next pages.

THEMATIC AREA

Curriculum Reform and Development of Teaching Learning Material

Over-all Country Picture

Pre 18th Constitutional Amendments Scenario

Curriculum Reforms have been underway since 2001 in Pakistan. From 2001-2003 curriculum 'revision' was undertaken in measured and tempered phases to keep the influential religious lobby in government at bay. In 2005-06 curriculum of all grades and subjects (grades I-XII including ECE and Literacy) underwent a comprehensive reform in response to critiques.

These National Curriculum Reforms began in 2005 embedded in three mega concurrent initiatives of the Ministry of Education, viz. i) the national education policy reform process (NERP); ii) the national curriculum reforms; and iii) the undertaking of the first ever national education census (NEC) of all service delivery units in education. The revision of National Curriculum continued from 2006 till 2010. For convenience it is called National Curriculum 2006. Its implementation was planned for the academic year 2010.

Curriculum Reforms: Constitutional Provisions, Institutional Processes and Scope

Before the 18th Constitutional Amendment 2010, curriculum, syllabus, planning, policy, centers of excellence and standards of education were on the Concurrent List of the Constitution of Pakistan.

The formation of Curriculum Wing at Ministry of Education in 1976 was followed by the establishment of four Provincial Curriculum

Bureaus (one in each province) to ensure provincial collaboration and evolve consensus in all activities falling within the purview of the Federation. The Provincial Text Book Boards were also established subsequently. In 2005, human resource capacity of Curriculum Wing, Ministry of Education was expanded and two teams of three experts each were added as the 'National Curriculum Council' to review, update and upgrade curriculum from Early Childhood Education to Higher Secondary School level.

The Curriculum Wing, Ministry of Education undertook comparative reviews of curriculum reforms in different countries. It reviewed the scheme of studies, followed by the revision of curricula for 25 core subjects (classes I to XII), which were notified in 2006. The review of remaining subjects as listed in the scheme of studies continued until December 2010. Elaborate stakeholder-consultations were held 'with teachers, administrators, educationists, curriculum experts and students including field visits; training of working teams through workshops and seminars; reviews of drafts by subject experts and working teachers leading to refinement of contents and preparation of a uniform curriculum format'. These comprised standards, benchmarks and learning outcomes as vital parts of the curriculum development process.

The key features of the National Curriculum 2006 are as follows:

- It is standards and competencies driven
- Learning objectives correspond to students' learning outcomes (SLOs)
- Adopts progressive approaches for primary, middle, secondary and tertiary stages of learning
- Life skills are integrated across subjects
- Focus on promoting creative writing and analytical thinking for learners rather than rote learning
- Detailed guidelines have been provided in the curriculum for textbook writers and teachers for delivery of the curriculum effectively.
- Guidelines have been provided for assessment and evaluation in addition to the learning outcomes specified in the curriculum.

Curriculum Reforms (2000-2009) – Milestones Planned and Achieved

2000	Review of Basic Science Subjects under Education Sector Reforms Action Plan
2001- 06	Production of textbooks
2002	Review of Social Science Subjects under ESR and production of textbooks
2005	Comprehensive review of all subjects
2006	Completion of review of National Curriculum and its publication
2007	National Textbook and Learning Materials Policy and Plan of Action (2007- 10)
2007-09	Development of textbooks in phases, Phase I = Grades I, VI, IX & XI
2010	New Textbooks planned to be in Schools

National Textbook and Learning Materials Policy 2007 and Plan of Action: 2007- 2010

An Inter-Provincial Committee represented by the education authorities, Textbook Boards, private sector and others was constituted to select and prescribe textbooks for use in public schools in the respective province or areas of jurisdiction. Under the Implementation Schedule notified by the Federal Ministry of Education for the New Curriculum, the Provincial Textbook Boards with the assistance of private sector publishers were required to prepare quality textbooks in various subjects for Grades I, VI, IX and XI by August 2007, but was re-planned for the academic session 2010.

Process for Production of the Textbooks under National Textbook and Learning Materials Policy 2007 and Plan of Action: 2007-2010:

- i) Advertisement by the respective Textbook Boards and National Book Foundation (ICT) for new textbooks based on the National Curriculum for Grades I, VI, IX and XI;
- ii) Inviting (advertising for) private publishers to produce manuscripts for the desired subjects (twice)
- iii) Manuscripts received, reviewed and sent back if required for amendments by Textbook Boards
- iv) Manuscripts reviewed by Textbook Boards sent to Curriculum Wing, Ministry of Education for further scrutiny and issuance of No Objection Certificate
- v) On receipt of NOC from Curriculum Wing, Ministry of Education publishers were to be given job orders for printing specified volume according to the terms and conditions agreed formally under the NTLMP & POA 2007.
- vi) After selection by the Provincial Committee, the respective Textbook Boards shall purchase, from the publisher whose textbook is selected, a print license for a certain number of copies and a certain period of time for the government schools through the Education Department processes.
- vii) Private schools will decide and choose from the approved and certified textbooks by the Textbook Boards according to quality and price, and purchase textbooks directly from the publisher.
- viii) Textbook Boards will invite national/provincial publishers to submit manuscripts and samples of supplementary reading and learning materials to the Textbook Boards for

review and certification as 'recommended learning materials' with age-wise and grade-wise classification.

- ix) For purchase and use of school reading and learning materials (other than textbooks) in government schools the recommendation certificate of Textbook Boards will be binding. Private schools are not bound by the recommendation certificate of Textbook Boards.
- x) Once printed these textbooks were to be with the TBB to be distributed to government outlets at district level according to estimates received.

The Wider Context of Education Reforms

Education reforms and policy shifts in Pakistan remained synonymous with changes of government. Education has been at the centre of ideological and social construction and 'strengthening of the nation state. In 2004, ESR were launched introducing paradigm shift in education from primary to sector wide approaches encouraging the formulation and implementation of higher education reforms through the newly constituted Higher Education Commission (HEC). The reforms have focused on Madrassah (religious schools) mainstreaming, phase wise curriculum revision, deregulation of examination boards, printing of books for all non-state players to participate, school wide reforms through district and provincial governments and institutionalized initiatives towards public private partnerships.

ESR was subsequently superseded by the NESRP and national curriculum reform in 2005. Education Sector Reforms were concurrently designed and negotiated for financing by the World Bank under various financing instruments of the Bank as well as through European Commission, GTZ, and UNICEF. The policy and curriculum reforms were undertaken amidst rejection of the Madrassah mainstreaming project.

Throughout the policy and curriculum reforms period, from 2001-02 to 2009 the development partners continued to support the reforming policy, curriculum, teacher education, assessment and institutional

strengthening at the national and provincial levels. The support resonated with government's identification of five to six basic pillars of quality in the National Education Policy (NEP), 2009. These were curriculum, textbooks, assessments, teachers' education, the learning environment in an institution and relevance of education to practical life / labor market.



Adjectival Education Initiatives

To counter the multiplying problems of environmental degradation, global warming, HIV Aids, terrorism, extremism, and human rights violations, the easiest approach is to create space for adjectival education. This had already been suggested in the 1998-2010 NEP and reinforced in the NEP 2009. In the new National Curriculum 2006 "new emerging developments and modern trends like human rights education, population and development education, environmental education, disaster and risk management, preventive education against HIV/AIDS and other fatal diseases, peace and value education, inclusive education, preservation of cultural heritage, inter-faith harmony, citizenship and other related aspects have been included in the curriculum at appropriate levels in different subjects.

Adjectival initiatives with respect to curriculum development were launched at the federal level in cooperation with the provincial/area governments in these areas. The implications for textbook writers, teacher education programs (pre and in-service), and classroom interactions are of immense importance to ensure that the curriculum is delivered meaningfully in the classroom.

Pre 18th Constitutional Amendment:

Table 4: Curriculum Development and Revision Process

Authority   Actions	Curriculum Wing Ministry of Education	Regional/ Provincial Level <ul style="list-style-type: none"> • Local Authorities • Inspectors • Teacher's Choice 	School Level <ul style="list-style-type: none"> • Heads • Teachers • Communities
Aims and objectives	National aims, as reflected in the National Educational Policy	Evaluation/study reports of curriculum centers provide/ change direction	Some aims of effective domains are suggested by teachers
Curriculum plan	National framework: syllabus and their grading	Introduce unique cultural/regional aspects, including mother tongue	Scheme of work, adjustment of timetable, provision for co-curricular activities, exams
Methods and approaches to learning	Teacher-training courses are designed, also in-service teacher training	Teachers' colleges implement training programs (pre-service)	Practice different methodology
Materials	Provincial textbooks are reviewed/ approved by Federal Ministry through National Review Committee	Provincial Textbooks Boards commission writers and select material on merit basis	Representation of teachers in the National Review Committee
Evaluation and examination	Inter-Board Committee of Chairmen co-ordinates activities of the Exams Boards	Board of Education holds exams	Trained teachers set the papers and evaluate the script

Post 18th Constitutional Amendments Scenario

The Eighteenth Constitutional Amendment Act 2010 has introduced significant changes having direct bearing on the education sector. Of the challenges and opportunities emerging as a result of these changes, the delegation of responsibility of curriculum and standards to the provinces is the most debatable. Curriculum provides a framework for the educational institutions determining the subjects, learning objectives, and learning outcomes. The key value of a curriculum is to ensure cohesion and uniformity in the education system of a country.

Key Changes Introduced in Education by 18th Constitutional Amendment

In terms of education governance the 18th Constitutional Amendment Act 2010 has reconfigured the federal and provincial relationship. The significant changes altering the education governance framework include the following:

i) Free and Compulsory Education- Introduction of Article 25-A

The amendment has inserted a new Article in the chapter dealing with fundamental rights in the Constitution of 1973. Article 25-A obligates “The State shall provide free and compulsory education to all children of the age of five to sixteen years in such a manner as may be determined by law”.

ii) Removal of the Concurrent Legislative List- Delegation of Subjects to Provincial Jurisdiction

The concurrent legislative list which included the subjects in the shared legislative jurisdiction of federation and provinces has been omitted. In the context of education the two key entries of concurrent list which stand devolved to the provinces include:

- Entry 38: Curriculum, syllabus, planning, policy, centers of excellence and standard of education.
- Entry 39: Islamic Education

iii) Empowering CCI: Revision of Federal Legislative List Part II

Part II of the Federal Legislative list, which is in the mandate of reconstituted and more empowered Council of Common Interest (Article 153-154), has been reconfigured. A number of new entries have been inserted. The entries which have direct bearing on education include: all regulatory authorities established under a federal law; standards in institutions of higher education and research, scientific and technical institutions and interprovincial matters and coordination.

iv) Omission of Sixth & Seventh Schedule

The enactment has omitted Sixth and Seventh Schedules altering Article 268(2) and Article 270(A) of the constitution. The omission has revoked the constitutional protection for the following statutes: The privately managed Schools and Colleges (Taking over) Regulation 1972; Aga Khan University Order 1983, The National College of Textile Engineering Order, 1985, and The Lahore University of Management Sciences Order 1985.

The omission/removal of the concurrent list under the eighteenth amendment has devolved the key roles of educational policy, planning and curriculum in the exclusive legislative jurisdiction of the provinces.

The National Curriculum 2006 as well as the National Textbook and Learning Materials Policy 2007 were framed after an intensive process with active participation from the provinces. The review of both the documents indicates that these sufficiently assuage the apprehensions of federating units. It is imperative that Pakistan must have a national coordinating mechanism for curriculum development and revision so as to ensure national cohesion, equitable opportunities to all, and to coordinate the development of curricula across the provinces and regions / areas.

Adhering to National Curriculum 2006 by Provinces

In Post-18th Constitutional Amendments Scenario all the Provinces and Areas are adhering to National Curriculum 2006. Every province is at different stage of translating the National Curriculum into Textbooks.

PROVINCE-WISE SCENARIO

PUNJAB

Punjab has adopted National Curriculum 2006 and has produced textbooks and Teaching Learning Material as per National Curriculum 2006 and the National Textbook and Learning Materials Policy 2007. Punjab is in leading position with Curriculum Reform and Development of Teaching Learning Material. It has so far published all text books for Grades I-X except Grade-VIII for which textbooks for Urdu and Computer Education have been published and Textbooks for remaining seven subjects are in pipeline. For Grades XI-XII new Textbooks will be implemented from the year 2015.

Role/Contribution/Achievements of the Institution on the Thematic Area: Curriculum Reform and Development of Teaching Learning Material

Punjab Curriculum Authority (PCA) is a newly established body in post 18th Constitutional Amendment scenario. Its role is to develop and revise curriculum as and when needed. Besides this, the Authority certifies to the effect that a certain textbook is in accordance with the prescribed curriculum. Last time, the revision of the curriculum for Grades: I-XII was initiated by the Federal Government in 2006 and this process was almost complete by March, 2011 when the Ministry of Education was devolved under 18th Constitutional Amendment. For convenience it is called National Curriculum 2006. At this stage, the Authority does not feel any need to initiate any revision in the curriculum. PCA has no role in the development of Teaching and Learning Material.

Punjab Textbook Board has so far published textbooks for Grades I-X except Grade VIII for which only two textbooks (Urdu and Computer Education) have been published and textbooks for remaining seven subjects are in pipeline. New Textbooks, as per the National Curriculum 2006, for Grades XI-XII will be implemented from 2015.

Directorate of Staff Development (DSD) is an important department in post 18th Amendment scenario. It is not directly authorized to initiate development and revision in the curriculum. However, being an educational

research body, it gives its recommendations for initiation for development and revision in the curriculum as and when felt necessary. At present, there is a feeling that quantum of level-wise Student Learning Outcome (SLO) seems to be very heavy, therefore their number be reduced. In near future, DSD may come up with some logical proposal for level-wise adjustment of SLOs.

Development of Teaching and Learning Material is a strong area of DSD. It has elaborately formulated, published and distributed Primary School Teacher Guides. DSD has also produced following Teaching and Learning Material:

- District Teacher Educators (DTEs) Training Manual/ ECE Training Module
- Six modules for secondary and elementary school teachers
- Head Teacher's Guide (Primary & Elementary Schools)
- Lesson Plans for English, Urdu and Science subjects of Primary classes for Primary School Teachers

National Educational Equipment Center (NEEC) produces certain learning material. It produces teaching kits for grade I-VIII, which is very helpful to make the students understand the subject matter. It also produces Secondary School Science lab equipment.

Punjab Information Technology Board (PITB, Lahore has assumed a unique role in the development of teaching and learning material and assessment. It has started a project to upload science subject textbooks online. Its project "e learning Punjab" aims to facilitate and encourage the use of educational technologies by providing digitized content, relevant supplementary resources and online assessment tools for students and educators. As a first step, digitized versions of textbooks of Biology, Physics and Chemistry for 9th and 10th grades and Science and Math of 6th, 7th and 8th grades are being made available online along with links to a sea of supplementary material available on the Web (<http://elearn.punjab.gov.pk>). These online books are augmented with animation, simulation, videos and self-assessment exercises. In future, the digitized version of textbooks for all grades will be uploaded online as well as into laptops or tablets, or made available in the form of DVDs.

Urdu Science Board (USB) has developed teaching and learning material in Urdu language which facilitates the learners and the educators to comprehend the subject matter in their national language. So far, it has produced 390 publications.

SINDH

Role/Contribution/Achievements of the Institution on the Thematic Area: Curriculum Reform and Development of Teaching Learning Material

In 2006-07 all provinces agreed to and approved the competency based curriculum to keep up with the international educational trends and to equip children with both knowledge and skills for continuing education and necessary life skills. Therefore, Sindh education department has undertaken the initiative for implementing the new curriculum 2006-07 by developing new textbooks and support materials based on the objectives and learning outcomes of the curriculum. For this purpose several meetings have been held to determine the road map for development of textbooks and support materials.

From 17th till 21st May, 2012 the four subject committees backed by Advisory Committee carried out an elaborate analysis of the relevant curriculum documents and concluded that the curriculum is 95% appropriate and shall be forthwith introduced and implemented. The suggested amendments can be added as addendum to the curriculum and/or notes to the textbook developers assigning the need to re-do the whole document.

The Sindh education department has undertaken the initiative for implementing the new curriculum 2006-07 by developing new textbooks and support materials based on the objectives and learning outcomes of the curriculum. For this purpose several meetings have been held to determine the road map towards textbook and support materials development

In an initial meeting chaired by the education secretary it was agreed that Sindh will move ahead with the application of the new curriculum through development of textbooks in the subjects of English, Science, Social Studies and Maths from Grades I-XI. In addition to the textbooks, support materials like workbooks and teachers guides will also be developed. Based on this recommendation a road map for development

of textbooks and support materials was formulated (7-8 April 2011) jointly by all relevant stakeholders including Sindh Textbook Board (STBB), Bureau of Curriculum, Reform Support Unit and Sindh Education Department.

In the same meeting it was agreed that books will be developed by private publishers in line with the new textbook policy and the Role of STBB will be that of a regulator, and facilitator of the textbook development process. In addition it was agreed that the role of Bureau of Curriculum will be enhanced to include the approval of text books for this process as this function of the Federal Ministry of Education is now devolved to the provinces. This will be done as an immediate step to jumpstart the process of textbook reform while parallel to this the capacity of Bureau of Curriculum will be strengthened to take up the challenging task of assessment, development and review of the curriculum for the province of Sindh in the post 18th Constitutional Amendment scenario.

The senior minister approved the road map and also emphasized the need to provide new textbooks to students studying in Sindh Government schools without any delay. After the 18th Constitutional Amendment, education is a devolved subject and the province under the delegated authority is now empowered to review/validate the existing curriculum to ensure that it is compatible with the needs and wishes of the people of Sindh and is free from any anti-democratic and extremist content.

On the direction of the senior minister a Provincial Advisory Committee and four subject committees for English, Maths, Science and Social Studies respectively were formed to complete the task without delay because a lot of time had already elapsed and children still had old books which were developed more than 10 years ago.

In 2010, the Department had also begun deliberations on the implications of the 18th Constitutional Amendment and generated several ideas both in the legal and institutional domains, e.g. Sindh Teacher Education Development Authority (STEDA), institutional development of Bureau of Curriculum, etc.

In early 2011, Reform Support Unit (RSU) was assigned the task to initiate the Textbook Development process in line with the national curriculum 2006 and new textbook policy of the federal government so that books could be provided to the students as per national curriculum. Subsequently a roadmap for textbooks development, in line with National Curriculum 2006, was prepared during 7-8 April, 2011 by Sindh Textbook Board (STBB), Bureau of Curriculum, Reform Support Unit (RSU) and Education Department with the support from GIZ

The roadmap was later (16th April, 2011) approved by the Minister with the directive that the new curriculum be reviewed/validated by provincial stakeholders / specialists to ensure that it does not contain any anti-democratic and pro-extremism materials, and that room exists for inclusion of province specific contents – personalities, monuments, history, etc.

Methodology of Review

The committees met from 17th to 21st of May 2012 at the RSU. All members were briefed about the review process and were given the general guidelines and parameters for the review.

The task of the committees was to carry out a quick review of the curriculum 2006 according to the following criteria:

- To ensure that it represents and promotes democratic values
- It does not by any means promote any form of violence or extremism
- To study the possibility of including province specific socio cultural elements in the curriculum and how it would materialize
- It was emphasized that this activity does not aim to carry out a major revision of the curriculum as the curriculum was developed in a participatory manner and stands approved by all provinces.

General Recommendations of Subject Committees

- The committees agreed that 95% of National Curriculum 2006-07 is suitable for the requirements of the modern day Sindh.
- Only a few minor amendments/modifications were suggested.
- The consensus was on the fact that these modifications be added separately as an addendum which can be given to the textbook writers to incorporate while preparing manuscripts /textbooks.
- However the committee showed concern over the fact that implementation of the curriculum should be limited only to the development of textbooks which had been the practice hitherto. The national curriculum 2006 envisages and promotes child centred teaching and learning approaches and emphasizes application of knowledge rather than memorization of facts. In this perspective curriculum implementation needs to be viewed in a more holistic manner with the ultimate aim to improve the teaching and learning processes and the learning environment.
- Textbook development is the first step to be followed by training of teachers for teaching the new curriculum and introduction of revised assessment and feedback approaches.
- For this purpose an overall curriculum implementation framework needs to be developed and implemented outlining all the steps to be undertaken for effective implementation of the curriculum. Bureau of Curriculum should oversee and coordinate this process with the support of textbook board and Reform Support Unit.
- The committees agreed that the textbooks should be developed as soon as possible as Sindh schools are still following a 10 year old curriculum. Parallel to the development of the textbooks the curriculum implementation framework should be outlined so that the necessary steps are undertaken by different

organizations in order that teachers' related materials can also be developed and teachers can be trained alongside, amongst other measures.

- The committee opined that textbook development process should be expedited so that students of Sindh government schools can have access to better quality books from the next academic year. For this purpose textbook authors and other stakeholders need to be trained in the understanding of the philosophy and approach of the curriculum and also in modern textbook development techniques.

Recommendations on Institutionalization of the Curriculum Review Process

- One of the main recommendations that flowed out of the review process was that the policy and review process of the curriculum need to be regularized and institutionalized within a legal framework.
- Policies and procedures, roles and responsibilities need to be laid out and clarified within the post 18th Constitutional Amendment scenario for undertaking the devolved functions.
- Within the same context issues pertaining to capacities of the related institutions need to be evaluated against the enhanced scope of work and activities and relevant capacity building measures need to be undertaken to strengthen the organizations to assume the responsibility of the assessment, review and implementation of future curriculum reforms.
- Within the legal provisions and policies, a framework for revision and implementation of the curriculum needs to be developed before any major curriculum reform is undertaken.
- For this purpose the committee recommended that a "Sindh Curriculum Policy and Review Unit" should be established in BoC within the provisions of a legal framework. The

responsibility of this unit should be to devise the policy for revision of curriculum and for the development, coordination and monitoring of the Curriculum Implementation Framework (CIF).

- Since the establishment of this unit is seen as a long term measure it is recommended that as an immediate step the Bureau of Curriculum should be empowered to approve textbooks developed for the curriculum 2006. The framework for implementing the curriculum 2006-07 including aspects of teacher training and assessments should also be developed and implemented immediately with the joint efforts of Sindh Textbook Board (STB), Bureau of Curriculum (BoC), Reform Support Unit (RSU) and the Sindh Education Department so that the curriculum 2006 is implemented through all pillars of quality education.
- In the long run the Bureau of Curriculum's capacity needs to be strengthened to carry out the challenging task of curriculum assessment, review and implementation for effective and sustainable reform of educational quality in Sindh.

Presently Grade I-IV textbooks have been developed and published on the basis of these reforms. Work is in progress on remaining textbooks. No changes in subjects have been recommended except in Social Studies in which accounts of local heroes and highlighting of local cultural values have been added.

Problems related with curriculum development

The challenge has been to accomplish objectives despite paucity of financial resources, technical expertise and trained human resource. Capacity related issues were evident in the area of curriculum review, development of materials, development of textbooks and development of the curriculum implementation framework.

KHYBER PAKHTUNKHWA

Role/Contribution/Achievements made and Future Plans of the Institutions on the concerned Thematic Area

Directorate of Curriculum and Teachers Education (DCTE), Peshawar

The DCTE is responsible for curriculum development and teacher education in the Province. The Director works under the Secretary to Government of Khyber Pakhtunkhwa, Elementary and Secondary Education Department and is assisted by two Deputy Directors. The Director supervises the work of the 20 Regional Institutes for Teacher Education (11 for males and 9 for females). The Deputy Director (Training) supervises the work of Subject Specialists, AV (Audio Video) Aids Officer, Assistant Director (Training) and Assistant Director (Examinations). The Deputy Director (Admin) looks after the work of Assistant Directors Physical Education, Audit and Planning and Development, Librarian, Budget and Administrative Officer and Office Superintendent.

The Directorate of Curriculum has a vital role to perform in the post 18th Constitutional Amendment situation. However, it does not have the required human, financial and technical support. Considering its important function the provincial government should prioritize strengthening of the Directorate. Similarly the legal and institutional framework for the textbook board will have to be revisited to make them compliant with the devolved functions.

In the post 18th Constitutional Amendment scenario DCTE has gained added importance as curriculum has been devolved to the provinces. Changes have been made in the Rules of Business and DCTE declared as focal agency for curriculum.

Textbooks and Learning Materials Development

Prior to the passage of the 18th Constitutional Amendment the curricula were prepared and endorsed at Federal level by the Ministry of

Education's Curriculum Wing. At that time the Provincial Directorate of Curriculum and Teacher Education (DCTE) was the organization responsible in Khyber Pakhtunkhwa for preparing provincial proposals for curriculum of different subjects at all levels of school education. Now after the 18th Constitutional Amendment, the DCTE is charged by the Government to be the competent authority for curriculum reforms and approval of textbooks. German International Agency for Aid (GIZ) and Department for International Development (DFID) have been supporting the Khyber Pakhtunkhwa Text Book Board in improving textual materials and capacity building of professionals in preparing high quality textbooks.

The Government of Khyber Pakhtunkhwa has adopted National Curriculum 2006 and has been providing free textbooks to all the children in the public school system since 2003-04.

New National Textbook Policy 2007

Khyber Pakhtunkhwa has adopted new textbook policy 2007. The provincial government under the articles of the new policy has the discretion to set the time frame keeping in mind the local conditions, training programs, and other influencing factors.

- For purchase and use of school reading and learning materials (other than textbooks) in government schools the recommendation certificate of Textbook Boards will be binding. Private schools are not bound by the recommendation certificate of Textbook Boards.
- Once printed these are with the TBB to be distributed to government outlets at district level according to estimates received.

Textbook Board (TBB) is a statutory body under an Act. Chief Minister Khyber Pakhtunkhwa is the Controlling Authority. It is headed by chairman with two members, secretary and subject specialists. Main job of Text Book Board is to publish text books according to approved curriculum. Supplementary Learning Material is also developed by the board.

Provincial Institute for Teacher Education (PITE), Peshawar

Provincial Institute for Teacher Education (PITE) Peshawar, an apex institute in Khyber Pakhtunkhwa, working for education sector in training of teachers “contents and pedagogical skills, education of school managers in “Leadership and Management Techniques”. PITE is working under the umbrella of Elementary and Secondary Education department (E & SE) in the leadership of Secretary Elementary and Secondary Education. PITE has cordial collaboration with a number of national and international organizations working in teacher education. PITE is member of provincial education cluster led by Department of Elementary and Secondary Education (E&SE) and co chair by UNICEF. PITE is chairing Technical Working Group (TWG) on teacher education. As per education cluster decision, TWG reviews and develops teacher training manuals for teachers of conflict affected districts/FATA.

Regional Institute of Teacher Education (RITE)

Function of RITEs is to plan, arrange, impart and assess pre-service teacher education programs. It acts as a center for in-service teacher training. RITE also assists DCTE in:

- i) Curriculum Development and Review
- ii) Development of Training Material
- iii) Planning, designing, conducting and monitoring in-service teacher training.

Functions devolved to the Provincial Education Department (E&SED) after the 18th Constitutional Amendment are Policy & Planning, Curriculum, Syllabus, and Standard of Education. As a result, the Department will face implications in the following areas:

- Capacity for Curriculum Development
- Law and capacity for implementation of Article 25A
- Additional legislation is required for curriculum and compulsory education

BALUCHISTAN

The Bureau of Curriculum and Extension Centre was created for research on curriculum in Balochistan in 1971. Curriculum Development has been devolved to the Provincial Government after the 18th Constitutional Amendment in 2010. The Provincial Education Department has not had any experience in curriculum review and development. In view of the capacity vacuum, the Balochistan Provincial Government has decided to adopt the last curriculum prepared by the Federal Government in 2006.

Curriculum implementation over the years has been limited to preparation of textbooks only. Most teachers, other professionals including examiners, parents and assessment remain dependent on the Textbook alone. Also no feedback mechanism is in existence to assess the gaps between actual, taught and learned curriculum. The Baluchistan Education Sector Plan developed following strategies for curriculum reform:

- i) The development of a curriculum implementation framework to increase the possibilities of achievement of the objectives of the curriculum. Curriculum Implementation Framework consists of dissemination of the curriculum, in-service & pre-service training, assessments, textbooks and feedback mechanism for future review of curriculum.
- ii) Development of a process for review of the curriculum
- iii) Effective implementation of the curriculum 2006 to ensure maximum possible achievements of the objectives of the curriculum
- iv) Capacity development of the education department and related organizations to implement the curriculum and monitor the implementation process.
- v) Development of provincial capacity to review the curriculum.

Mother tongue will be introduced in curriculum as an elective subject and a Bill has been passed by the Balochistan Assembly. Medium of instruction is Urdu. Curriculum Bureau also targets recovery of school-

age out of school child (9-16) through an “Alternate Learning Path” Program. In ALP Curriculum of (1-2) class and (3-4) class are combined by reducing common topics. In this way child of (9 years to 16 years age) passes primary class in three years. ALP is in place in Lasbela, Quetta, Zhob, Sherani & Mushokhel.

Balochistan Textbook Board is responsible for development of textbooks since 1977. Until the 18th Amendment to the Constitution, the Federal Government had the responsibility for final approval of textbooks. The function has now been devolved to the Provincial Government. The current reforms provide an opportunity to democratize the processes for review and approval by Balochistan Text Book Board (BTBB) and Bureau of Curriculum (BOC). Balochistan has adopted the Textbook Policy 2007 to outsource publishing to the private sector but it has so far been unable to implement it due to resistance from the publishers as well as reluctance of the Textbook Board.

Textbook Board has published six books in phase-I in 2012, fifteen books in Phase II in 2013 and twenty books will be published during 2014. Up till now Balochistan Textbook Board has published Textbooks of 43 subjects out of total 73 subjects. Balochistan Textbook Board also designed and published Math for ECE class. Free Textbooks are provided to the students up to Secondary level in all the public schools of the Education Department of the Government of Balochistan. At present no feedback mechanism exists to ensure quality and relevance to the child’s level. The current process of textbook development, review and approval will be revised and standardized. Following strategies are applied for preparing quality textbooks in Baluchistan:

- i) Preparation of standards for Textbooks at the input, process & output levels.
- ii) Preparation of textbooks under the SLO based curriculum 2006.
- iii) Adoption & implementation of Textbook Policy 2007
- iv) Capacity review and enhancement of the Balochistan Textbook Board.
- v) Capacity review and enhancement of the private sector publishers.

Balochistan also developed modules for Teaching of Science, Teaching of Mathematics, Teaching of English, Teaching of Urdu and Teaching of Social Studies for Primary Elementary and Secondary School teachers. Provincial Institute of Teacher Education also developed modules for use of Technology in Education, school and classroom management through monitoring, multi grade teaching, health education, integrated syllabus and modern teaching, and ICT training for teachers.

Islamabad Capital Territory

Islamabad Capital Territory (Federal Directorate of Education) has adopted National Curriculum 2006 and has developed textbooks and Teaching Learning Material. In all schools functioning under FDE textbooks developed by National Book Foundation are being taught on the basis of National Curriculum 2006 while some books were adopted from Punjab Textbook Board. In the curriculum, no change has been made after 18th Constitutional Amendment. Although Curriculum Wing is functioning under Capital Administration and Development Division, they are still with national curriculum 2006. As far as training of the teachers is concerned, FDE provided training / refresher courses facility to the teachers. Textbooks were issued to the students from grade 1-XII

Conclusion

- All the provinces and regions of Pakistan including Islamabad Capital Territory have adopted National Curriculum 2006. Khyber Pakhtunkhwa and Sindh have added local heroes and culture in textbooks of Social Studies.
- Punjab, Khyber Pakhtunkhwa and Islamabad Capital Territory have developed all the textbooks from Grade I-X following National Curriculum 2006. Sindh has developed textbooks from Grade I-IV following National Curriculum 2006. Balochistan has developed 42 textbooks following the National Curriculum 2006.
- Curriculum provides a framework for the educational institutions determining the subjects, learning objectives, and learning outcomes.
- The key value of a curriculum is to ensure cohesion and uniformity in the education system of the country.

- Textbook Development has been taken up with the main objective to improve the quality of education at all levels through better quality textbooks at affordable prices and other learning materials for promoting Pakistan as a knowledge-based society.
- Curricula are effectively translated into the textbooks according to the learning objectives and learning outcomes identified in the new Curricula.
- Curriculum has now been effectively devolved to the provincial domain, resulting in the closure of the Federal Bureau of Curriculum.

THEMATIC AREA

Strategies for Making Schools Inclusive

Over-all Country Picture

Inclusive education is commonly associated with the education of children with disabilities and special educational needs in main stream schools. Inclusion aims to maximize the participation of children with disabilities and ‘special educational needs’ in main stream schools. It is a complex process and requires radical changes in schools, education policies, teaching practices and insights into some of the complexities and contradictory contexts and exclusionary pressures within institutions.

An inclusive school is the best place for preparing young people to live in a diverse world. In order for students with disability to learn together with their peers in a meaningful and fruitful way, a support system must be in place. This support system makes sure that there is equal access for all students to all the learning resources available in the school. This way, students with disabilities can fully participate in all the learning resources available in the school together with their non-disabled peer.

Every child has different abilities; learns in a different way and at different pace. Inclusive learning demands that friendly and barrier-free environment should be created in every school and community so that all children are enabled to develop to their full academic, social, emotional & physical potentials. So, more and more children with disabilities must be enrolled in regular schools where they can play, learn and grow up with their non-disabled peers. Inclusive and child friendly education therefore is seen as an approach to school improvement. Inclusion is about making quality education available to all. Therefore all schools should be inclusive, child friendly & welcoming. The concept ‘Inclusive Child Friendly’ defines “disability” as the outcome of the interaction between a

person with impairment and the environmental and attitudinal barriers she/he may face.

Impairment – Disability – Handicap may result in poor grades. Children with poor grades are consistently classified as having a learning disability, often without any proper assessment of why these children experience barriers. These barriers may be caused by cramped classroom conditions, inflexible curricula & examination systems, learning material that lacks relevance to many children or the lack of child-friendly and child-centered teaching approach. Therefore, labeling of children based on unqualified and random assessments is a challenge to inclusion and education for all. For best inclusive education:

- Create an environment in which all children feel equally valued.
- Children should be allowed to communicate in their first language.
- Children should be allowed time to express their thoughts and opinions.
- Try to ask questions from children to build their confidence.
- Be generous, genuine and honest with praise to develop a healthy self-esteem and confidence.
- Children should be encouraged to state their opinion. Evaluate the academic, social, emotional and physical development of children.
- Organize the classroom and seat the children to optimize opportunities for communication, interaction and learning for all the children in the classroom.
- Make sure that you let all the children in the class know that you care about them and their need.

- Motivate children to do good deeds, behave well and develop self-discipline.
- Improve communication between schools and parents.
- Encourage the child to repeat a good deed or a good utterance regardless of his/her abilities. Children with social difficulties experience barriers in contact, play and interaction with other children. Children with emotional difficulties struggle with their feelings. Children with behavioral difficulties experience difficulties in controlling their own behavior.

In all Provinces and Areas of Pakistan the status of Inclusive Schools and Inclusive Education is almost same which may be summarized as follows:

- No public school can deny admission to even a complete special child.
- As experienced, about 85% of special children have mild disability. Normally, they join regular schools and get education in a normal way along with normal peers.
- Teachers usually take extra care of these mild special learners.
- Regular schools do not have special arrangements for special children. However, mild special children, with their will-power, special attention of teachers and school-management do complete their schooling along with normal peers.
- Provincial and Regional governments have taken a few initiatives to cater to special needs of mild-special children studying in regular schools. Punjab is considering to provide special funds through Public Sector Development Program (PSDP) to meet needs of mild-special children to facilitate them further to study in regular schools.

- Almost every Tehsil (a sub-unit of a District) has a separate school for special children who have any severe disability which does not allow them to study in a regular school.

Government of Pakistan is very much committed to achieving equity and equality in education by implementing the inclusive education philosophy in the existing system of education. The inclusive education system will lead the society towards an inclusive society. This shift in the education system will transform our societal paradigm from exclusion to inclusiveness by removing the barriers of ethnicity, disability and other discriminations.

Islamabad Declaration on Inclusive Education was made on April 27, 2005 stating that we will “develop inclusive, child and learning friendly environment at all levels of the mainstream public and private education system from pre-primary to tertiary education throughout Pakistan”. It was further stated that we will ensure “all teachers and school administration in pre and in-service education and training will learn to embrace and encourage the diversity of needs and abilities of children among others through development and implementation of flexible curricula and evaluation systems by using technology to improve teaching and learning process”.

To help the professional to work in the inclusive schools there have to be two types of opportunities for their professional uplift. At present only in-service training institutes are offering workshops on inclusive education whereas the pre-service training institutes are not focusing on this aspect.

In 2005 all Provincial and Federal governments signed a national document called “Islamabad Declaration on Inclusive Education”. It emphasized the following:

- Ensure that all children regardless of gender, abilities, and socio-economic, cultural, and ethnic backgrounds:
 - Are treated with dignity and respect;
 - Have equal access to education, health services, work and all other aspects of life;
 - Develop their social potential;

- Have access to learning material in appropriate medium and technical devices; and
 - Develop confidence in their abilities, skills and future prospects.
- The declaration also called for preparation of provincial plans. Neither did the plans materialize nor were the concepts absorbed into the education sectors of the provinces.
- National Education Policy 2009 also stated a similar objective:
- To equalize access to education through provision of basic facilities for girls and boys alike, under-privileged/marginalized groups and special children and adults.

PROVINCE-WISE SCENARIO

PUNJAB

Conventionally, there is a policy in Punjab that no child should be stopped from joining a school even if he/she has some physical deformity. It is estimated that almost 85% of the special children have some mild disability. Such learners are encouraged to join regular schools. In order to make the environment conducive for mildly disabled students, the Punjab Department of Special Education has arranged a number of training programs to prepare teachers to handle such learners. It transpires that Inclusive Schools do exist historically. For remaining 15% special children, Department of Special Education is running special schools which are exclusively for special children.

Department of Education, Punjab has already issued instructions to the regular schools to admit all learners without considering their physical incapacities. Department of Special Education has recently submitted a Project Proposal (PC-I) costing Rs.1, 235.00 million to the provincial government for approval. The project will cater to special needs of the mild- special children so that they can easily keep pace with their normal classmates. The project has also training component for teachers so that they can be trained to facilitate these mild-special children. As per Census 1998, total Punjab population was 73,621,000, among them were 1,826,623 disabled i.e. 2.5%. Out of total disabled persons the number of school going age (5-19 years) was 605,695.

Services / Incentives:

- Free education
- Free textbooks & Braille books
- Free uniform
- Free pick & drop facility
- Free hearing aids
- Guidance & counseling, Sports & recreational activities
- Vocational training

SINDH

Government of Sindh is committed to universal education in Sindh without any discrimination. Special children are not barred by any notified admission policy. The Government of Sindh has passed ‘Sindh Right of Children to Free and Compulsory Education Act, 2013’ that covers all children 5-16 years of age without discrimination including the most disadvantaged and those with special needs.

The Sindh Right of Children to Free and Compulsory Education Act, 2013

The law is a key vehicle for achieving the objectives of Sindh Education Sector Plan (SESP). The Act contains 30 comprehensive articles and eight chapters articulating the right of all children aged 5-16, including those who are out of school, disadvantaged and with special needs; to education. Inclusive education principles will be derived from the National Policy for Persons with Disabilities (2002) and international conventions.

Gender, Disability & other Social Considerations

With the support of USAID, Education Department is constructing schools in flood affected areas and schools merged under School Consolidation Policy. Education Department is using improved building standards in construction of these schools. For gender, disability and other social consideration, the school planning and design includes special provisions for gender and accessibility to the disabled and cater to community needs and cultural requirements.

Designs of the school buildings are in compliance with the requirements of Annual Development Program. These include access ramps with handrail, doorways, corridors, special toilets and facilities within the classroom.

Problems regarding inclusive education

- Lack of commitment
- Lack of professional development
- Lack of supportive policy
- Lack of school level knowledge
- Lack of standards supporting special children in school construction
- Non-availability of trained teachers

Sindh Education Sector Plan

Government of Sindh gives high priority to special education. Government of Sindh has Special Education Department that is overall in-charge of this important subject. Chief Minister, Sindh has approved Sindh Education Sector Plan (SESP). The Sindh Education Sector Plan (SESP) has built upon the National Curriculum 2006. The vision and objectives of Sindh Education Sector Plan (SESP) are aligned with those of the National Education Policy, aiming to contribute to Pakistan's achievement of the National Poverty Reduction Strategy, the internationally-agreed Education for All (EFA) commitments, Millennium Development Goals (MDGs).

The Special Education Department

The Special Education Department was given an independent status in October, 2011. Since then the department is endeavoring to improve the quality of education provided in Special Education Schools/centers through various revolutionary initiatives.

Availability of Data

There is severe lack of updated and reliable data of persons with disabilities (PWDs) in Pakistan. It has been 16 years since the 1998 census, after which no provincial or federal level statistics have been collected for persons with disabilities (PWDs). The department of Special Education, Sindh is striving to initiate provincial level data collection for better programming, planning and policy making:

Achievements

- Provide free Education to Special Children
- Free pick and drop facility to Special Children
- Nutrition @ Rs. 42/- per day/per special child on attendance
- Free textbooks, exercise books, bags, stationery to Special Children
- Free Uniform/Dress Summer & Winter Season along with Socks and Shoes
- Provide free Education, Secondary, Higher Secondary and Skills to the Special Students
- Free Rehabilitation of Special Children
- Free Vocational Training
- Free Medical Checkup (Hearing Assessment, Physiotherapy, Speech Therapy etc.)
- Study Tours of Normal Schools
- Arranging quiz/speech programs
- Counseling/Guidance
- Free Computer Training

KHYBER PAKHTUNKHWA

Institution: Social Welfare and Women Development Department (SW&WD) Role/Contribution/Achievements:

The Special Education, Vocational & Skill training and rehabilitation of all types of disabled children is the responsibility of Social Welfare Department. Disabled persons deserve special attention of the Government and the society.

Provision of Education & Rehabilitation Facilities to Special Children

According to 1998 census the total population of Khyber Pakhtunkhwa is 17.656 million, and the ratio of 4 categories of disability is as under:

Table 5: Rehabilitation Facilities

S#	Name of Category	No. of disability (overall)	Below 18 years	%age
1.	Physically Handicapped	0.426 million	0.170 million	2.41 %
2.	Mentally Retarded	0.319 million	0.127 million	1.81%
3.	Blind	0.213 million	0.085 million	1.21%
4.	Deaf	0.106 million	0.042 million	0.60%
Total		1.064 million	0.425 million	6.03%

The main strategy of Social Welfare & Women Development Department was the well being and uplift of the community in general and vulnerable groups in particular. The department initiated various projects for male, female and child beggars, orphans, destitute women and disabled children in the province.

Similarly, with the assistance of UNICEF, help lines for the welfare & protection of children were established in Peshawar, Mardan & Swabi

districts. An amount of **Rs. 205.112** million was allocated for **41** projects of which, **12** have been completed. The achievements are listed below.

Access to Education and Skills

- i) 40 disabled children were given special education.
- ii) 135 orphans were provided with shelter and skills.
- iii) 1085 poor women were provided with vocational training and shelter.

BALUCHISTAN

In Balochistan there is very limited understanding of the inclusive education concept across teachers and administrators. It is applied in a limited way in textbooks, classroom and examinations. School building standards do not cater to the requirements of inclusiveness. For most personnel in the education sector the concept is limited to the special children and a handful of special education institutions mostly located in Quetta.

Balochistan is a diverse province with multiple ethnicities, high levels of poverty and gender gaps. In recent years violence has been seen in parts of the province and in some cases specific communities have been on the receiving end especially in terms of sectarian attacks. While conflict creates its own marginalization that leads to movement of people, exclusion due to threat of violence and a general attitude of intolerance, inclusive education concepts have not yet been fully comprehended in the province.

Government of Balochistan Education Department plans following strategies for inclusive education:

- i) Promote inclusive education in Balochistan through creating awareness and understanding and expansion and improvement of service delivery for inclusive education.
- ii) Changes in attitudes of teachers and managers towards inclusive education through training.
- iii) Changes in school environment.
- iv) Initiating a process of including children with special needs into regular schools.
- v) Expansion of facilities for special children who cannot be accommodated in normal schools.

Special Education in Balochistan

The Department of Social Welfare has the responsibility for special education in the province. There are four government run institutions in the province: one each in Quetta, Sibi, Khuzdar and Turbat (Kech). Only

Quetta based institutions have the facilities for separate set ups for the four categories: Deaf & Dumb, Blind, Physically disabled and mentally retarded. In the other three districts the children use the same classroom.

Three non-government institutions stand out: School for Special Children, Killi Shabow, Idara e Bahali Mustahqeen and Garrison School for Special Children. All are based in Quetta. In response to the Islamabad Declaration, the Government of Balochistan has attempted to introduce the concept of “Inclusive Education” but there has been little success. Officials and Teachers of the sector identified the following issues:

The curriculum designed by the BOC does not fully accommodate the needs of the Sector.

1. The coverage is limited to four districts only and with an enrolment of 649 also reveals the need for expansions.
2. While teachers’ qualification criterion is B.Ed Special Education in-service trainings are missing.
3. There is a shortage of staff even within the existing facilities especially female staff.
4. Laboratories for teaching are under construction but trained staff to run the same has not been hired.

Islamabad Capital Territory

The Federal Government designed the National Plan of Action 2006 to implement the National Policy for persons with disabilities. Ministry of Social Welfare and Special Education is responsible to implement this policy. In this policy various areas have been identified and Inclusive Education is one of them. Details of this policy are underlined below:-

Goal/Outcome

To provide inclusive educational opportunities for a large number of children with moderate and mild level disabilities from kindergarten to grade X in cost effective ways.

Short Term Steps (July 2006 –onward)

1. Enact legislation, with enforcement mechanism, to mandate education for all children, including children with disabilities, to meet the goals of the Dakar Framework for Action and the Millennium Development Goal of primary education for all children by 2015. Children with disability need to be defined in the light of national plans on Education for All of the Dakar Framework Action.
2. Amendment is made in curriculum including textbooks and methodologies for facilitating children with special educational needs.
3. Developing a mechanism governing education, evaluation and examination system for children with special educational needs.
4. Review existing curriculum of teachers training at all levels to ensure incorporation of inclusive education as integral component of the training modules and also increase such training opportunities.

5. Initiate modifications in physical environment of regular schools to make them accessible to special children.
6. Arrange adequate accommodation in normal school buildings to manage mainstream education.
7. Sensitization, orientation and training of regular school teachers on special educational needs of children with disabilities.
8. Provision of resource material and specialized aids in selected districts to be followed by wider coverage. Arrange incremental provision of IT in regular schools from kindergarten to grade X.
9. At least one Inclusive Education unit per Union Council and one Special Education Unit at Tehsil level along with hostel facilities are to be established by Provincial / District governments or Non Governmental Organizations (NGOs) over a period of 5 years.

Current Inclusive Education Program in Islamabad

The Federal Directorate of Education launched a pilot project regarding implementation of Inclusive Education in 20 selected institutions under its control. The Institute of Special Education will provide teacher training facility to the teachers of these schools regarding inclusive education. In this way the concerned departments in Islamabad are making efforts to implement government policy regarding inclusive education

Conclusions

- All the Formal Schools in all Provinces/Regions of Pakistan including Islamabad are providing admission to mildly disabled children.
- Severely disabled children are given admission in Special Education Institutions in Pakistan.
- Punjab and Islamabad are providing training to the teachers of formal schools for teaching mildly disabled children.
- Inclusive Education is a new and developing field in Pakistan. The non-availability of trained staff is the main hurdle in the speedy expansion of educational services.

- Mainstream schools in Pakistan are currently facing enormous challenges regarding the successful implementation of inclusive education.
- Mainstream primary schools are not yet ready to meet the challenges of inclusive education.
- Unfriendly school infrastructure for disabled pupils is a major hindrance.
- The Special Education, Vocational & Skill training and rehabilitation of all types of disabled children is the responsibility of Social Welfare Department.
- After getting education and vocational and skills training they will be at par with their counterparts who are getting education in normal schools.
- Ensure development with due consideration to Social Justice and with active participation of the people, and minimum financial investment by the government achieve the objectives of social welfare.
- An advocacy and awareness campaign is launched to create a positive attitude of the community towards inclusive education.
- Mobilize community resources to meet social welfare need at local level through community organization & development.
- Evaluate, standardize and further promote the program of social welfare organization for handicapped through financial assistance and other appropriate measures. Social Welfare sector within its frame work and function aims at providing social welfare services in general and to special groups (Handicapped) in particular.
- Financial assistance to deserving handicapped children for Education, Training, and Treatment and Mobility.

THEMATIC AREA

Professional Development of Teachers to Impact Learning For All

Over-all Country Picture

Professional development of teachers is a pre-requisite for providing quality education to the masses and it has positive impact on learning achievement of the students. Teachers are essential players in promoting quality education, whether in schools, colleges or universities. They work as catalysts of change. No education reform is likely to succeed without the active participation and ownership of Professional Trained Teachers. Therefore, teachers at all levels of the education system should be respected and adequately remunerated; they should have access to training and ongoing professional development and support through open and/or distance learning; and be able to participate in locally and nationally designed Professional Development Programs. Clearly defined and more practical strategies must be put into place to identify, attract, train and retain good teachers. These strategies should address the new role of teachers in preparing students for an emerging knowledge-based and technology-driven economy. Teachers must be able to understand diversity in learning styles and in the physical and intellectual development of students, and to create stimulating, participatory learning environment.

The quality of education provided by the public sector in Pakistan has been poor due to low levels of teacher competence, lack of classroom-based support for teachers, poor quality of textbooks and learning material, lack of systems to assess student-learning outcomes, uneven supervision, insufficient resources for critical teaching and learning material, and weak sector governance and management. Findings of various research studies indicate that teacher quality, and supportive school organization and management significantly influence school improvement and eventually pupil learning. Literature also suggests that the quality of a teacher is generally dependent on the quality of his/her education, training, and

availability of post-training support. Professional development of teachers plays a vital role in achieving quality education for all.

Various studies and reports have already been undertaken to look into teachers' professional development in Pakistan. These research studies found that teachers' performance and quality are most affected by educational qualification of teachers; recruitment on merit; adequate teacher performance monitoring system; incentives; upgrading of teacher skills and growth oriented career structure.

National Education Policy and Professional Development of Teachers

Since 1947, successive governments in Pakistan have made following National Education Policies and reforms:-

1. Pakistan Educational Conference – 1947
2. National Education Plan – 1951
3. The Commission on National Education – 1959
4. Report of National Commission on Students Problems – 1967
5. Recommendations for Education Policy – 1969
6. New Education Policy – 1970
7. Education Policy – 1972-80
8. National Education Policy – 1992-2002
9. National Education Policy – 1998-2010
10. Education Sector Reforms – 2001-2005
11. National Curriculum Reforms – 2006-07
12. National Education Policy – 2009

Directing education improvement in the country, each policy has been ambitious in its aims and critical of past failures. 'A common feature of all policies, plans, programs, and schemes is that all of them have been unsuccessful in changing Pakistan's education sector significantly'. However, teacher's education remained an inbuilt gradient of all national education policies.

National Education Policy, 1992

Salient feature of this Policy related to teachers' education was to raise the quality of instructions through an extensive in-service teachers' training program, by modernizing curricula and text books, by improving physical facilities, and by introducing activity oriented computer sciences at all levels of school education.

National Education Policy 1998-2010

With respect to Teacher Education and Training the NEP 1998-2010 proposed objectives and strategic actions. The most important are as under:-

- To create a matching relationship between the demand and supply of teachers;
- To increase the effectiveness of the system by institutionalizing in-service training of teachers, teacher trainers and educational administrators;
- To upgrade the quality of pre-service teacher training programs by introducing parallel programs of longer duration at post-secondary and post-degree levels;
- To make the teaching profession attractive for young talented graduates, by institutionalizing a package of incentives;
- To develop a viable framework for policy planning and development of in-service and pre-service teacher education programs; and
- To provide for management training of educational administrators at various levels.

The Policy undertook a thorough assessment of teacher education issues and proposed corrective measures. Several of the identified issues remained valid since teachers are considered the lynchpin for quality and implementation of reforms in the classrooms. International Development Partners suggested that once a national framework of policy principles and priorities was agreed and communicated, the lower tiers of government should consider how their current strategies, plans, and programs reflected this framework and identify if any adjustments were required.

National Education Policy 2009

NEP 2009 suggested specific measures in respect of teacher's professional education and training. It suggested that:

- i. A bachelor's degree, with a Bachelor of Education (B.Ed), shall be the minimum requirement for teaching at the elementary level. A masters degree for the secondary and higher secondary, with a bachelor's degree in education (B.Ed.) shall be ensured by 2018. Primary Teaching Certificate (PTC) and Certificate in Teaching (CT) shall be phased out by encouraging the present set of teachers to improve their qualifications, while new hiring shall be based on the advanced criteria. Exceptions shall be made in case of less developed areas where teachers with relevant qualifications are not available. Diploma in Education (D.Ed.) may be used as an intermediate qualification till B.Ed. teachers are available universally.
- ii. Teacher training arrangements, accreditation and certification procedures shall be standardized and institutionalized.
- iii. Teacher education curriculum shall be adjusted to the needs of the school curriculum and scheme of studies. The curriculum shall include training for student-centered teaching, cross-curricular competencies, and an on-site component.
- iv. A separate cadre of specialized teacher trainers shall be developed.
- v. Governments shall take steps to ensure that teacher recruitment, professional development, promotions and postings are based on merit alone.
- vi. All teachers shall have opportunities for professional development through a program organized on a three-year cyclic basis. Progress in career shall be linked to such professional development.

- vii. In-service teachers training in mathematics shall be provided, with due attention to developing conceptual understanding, procedural knowledge, problem solving and practical reasoning skills.
- viii. In-service teacher training in science shall be based on real life situations, use of science kits and provision of science kits to all primary and middle schools.
- ix. Teacher allocation plans, likewise, shall be based on school needs and qualifications of teachers. Over the next two years, Governments shall develop a rationalized and need based school allocation of teachers, which should be reviewed and modified annually.
- x. Provincial and Area Administrations shall develop effective accountability mechanisms, including EMIS data on teacher deployment, to control absenteeism and multiple job holding,
- xi. Institutionalized and standardized in-service teacher training regime shall be established in those provinces where it has not already been done.
- xii. In-service training shall cover a wide range of areas: pedagogy and pedagogical content knowledge; subject content knowledge; testing and assessment practices; multi-grade teaching, monitoring and evaluation; and programs to cater to emerging needs like trainings in languages and ICT.
- xiii. Training needs shall be assessed on the basis of research and training programs.
- xiv. Governments shall take steps to improve social status and morale of teachers. These measures include: up-scaling of teacher salaries as part of establishing a separate teaching cadre and teaching career; teachers' professional development, and a reward system based on performance measures.

- xv. Incentives shall be given to teachers in rural or other hard areas, at least to compensate for loss in salary through reduction of various allowances given for urban but not for rural postings.
- xvi. The teaching workforce shall be managed on a truly professional basis, organized as a specialized function.
- xvii. In-service teacher training institutions shall emphasize developing the capacity of teachers and school managers for school development plans, to overcome low achievement scores.
- xviii. Special short term courses for improvement of language skills for rural area teachers shall be designed.
- xix. The voice of teachers associations shall be given due consideration in decisions on collective issues affecting teachers.
- xx. Government shall aim to draw upon resources from the private sector through public private partnerships, especially in the areas of teacher education and professional development programs.
- xxi. International Development Partners' resources shall be harnessed within a broad national program of teacher improvement for the country as a whole through inter-tier collaboration.
- xxii. Maximum age limit shall be waived off for recruitment of female teachers.

Acquiring pre-entry professional qualification through various institutions in Pakistan

In Pakistan teachers are required to get professional qualification and in-service training which is considered necessary for their professional development. The situation of pre-service training is as under:-

Table 6: Pre-service Teacher Training Programs in Pakistan

Nomenclature	Duration	Pre-requisite Education Qualification
*Associate Degree in Education (ADE)	3 Years	FA/F.Sc
B.Ed (Hon)/ Elementary	4 Years	FA/F.Sc
	2 Years	ADE
B.Ed	1 Year	BA/B.Sc
M.Ed	1 Year	B.Ed
M.A. (Education)	2 Years	B.Ed
Drawing Master Course	1 Year	FA/F.Sc
		B.A./B.Sc
Diploma in Physical Education	1 Year	FA/F.Sc
		B.A./B.Sc
OT (Language)	1 Year	FA/F.Sc
		BA/B.Sc
M.Phil (Education)	2 Years	MA (Education)
Ph.D (Education)	2 Years	M.Phil (Education)
Ph.D (Education)	5 Years	M.Ed/M.A. (Education)/ M.Phil (Education)

*Existing P TC and CT Teachers are required to do ADE by 2018.

The aforementioned pre-service training programs are offered to prospective teachers in the country. However, in Sindh and Punjab other programs are also offered to the teachers as pre-service programs. For example in Sindh and Balochistan Primary Teaching Certificate (PTC) and Certificate in Teaching (CT) are still being offered by the Elementary Colleges whereas in other provinces after National Education Policy 2009 both these programs have been stopped as per direction of this policy. Similarly in the Punjab some other pre-service programs are being offered to the teachers.

In-service Teachers Training

After getting professional qualification teachers are eligible to get specific positions in Education Department. The in-service training is provided for professional development of serving teachers and education

managers. Almost in all the provinces and regions including Gilgit-Baltistan and AJK, these in-service-training facilities are being provided with the financial assistance of the international donor agencies. These include USAID, GIZ, DFID, CIDA, UNESCO, and UNICEF and Save the Children etc. for example CIDA provided in-service training to teachers in Khyber Pakhtunkhwa in various subjects which included Mathematics, General Science, Social Studies, History/Geography and English and they trained more than 5000 teachers in 2012.

In almost all the provinces and regions there is in-service training program of two to four week duration for primary/elementary teachers of English, Urdu, Mathematics, Science and Information Technology.

Role of teacher training institutions after 18th Amendment in constitution

At the time of collection of information, the respondents were requested to explain the situation after 18th Constitutional Amendment. They were of the opinion that their role has been increased. Now they are responsible for:

- Development of curricula
- Development of scheme of studies
- Development of Strategic Plan for Curriculum Reforms, Review and Approval of Textbooks
- Development of supplementary materials
- Reforms in examination system
- Preparation of policies and plans in the field of Curriculum Development and Teacher Training
- Up-dating curricula and training methodology for both pre-service and in-service Teacher Training

PROVINCE-WISE SCENARIO

PUNJAB

Minimum professional qualification for primary school teachers has been enhanced from PTC/CT to FA/F.Sc, ADE, BA/B.Sc, B.Ed/M.Ed. Working PTC/CT teachers have been directed to improve their qualification within three years. Teachers Training Institutions are providing Pre-Service Training to the prospective teachers. In-Service Training is also being provided to the school teachers. Supervision and monitoring of teachers is done by Education Managers and Officers.

In Punjab, Directorate of Staff Development (DSD) has started regular In-Service Training Program for Primary/Elementary Teachers financed by the Punjab Government in the subjects of English, Urdu, Mathematics, Science and Information Technology.

The government has devised a strategy which requires that after completion of this Training Program of the Teachers, the performance in the schools is monitored by the Heads. After one month, performance of their students is assessed and the teachers are awarded grades e.g. (A, B, C, D, E) by the School Heads in the light of performance of their students. Those teachers who are awarded low grade are provided training again for their improvement. The DSD conducted impact study of in-service training in 2012. According to this Study 29.24% teachers could not report to DSD, whereas 56.53% teachers have improved their teaching skills, whereas 14.17% did not improve. Presently DSD has again designed in-service training facility for these 14.17% teachers for improvement. DSD also provides in-service training to Education Managers who are directly interacting with teachers.

In Punjab some other initiatives have also been taken for the improvement of in-service training program. These include:-

- i) Computer labs and e-labs having access to Higher Education Commission (HEC) Library
- ii) Use of Skype for monitoring by DSD in Elementary Colleges

- iii) Database Management
- iv) Development of website
- v) Monitoring of activities on Skype during classes
- vi) Development of web content
- vii) Development of website of Government Colleges of Elementary Teachers (GCETs)
- viii) Research work on Teacher Recruitment in collaboration with USAID.

SINDH

Minimum professional qualification for primary school teachers has been enhanced from PTC/CT to FA/F.Sc, ADE, BA/B.Sc, B.Ed/M.Ed. Working PTC/CT teachers have been directed to improve their qualification within three years. Teachers Training Institutions are providing Pre-Service Training to the prospective teachers. In-Service Training is also being provided to the school teachers. Supervision and monitoring of teachers is done by Education Managers and Officers.

Education Sector Reforms in Sindh

The Sindh Provincial Rural Support Program (PRSP) was launched in 2003 with the multi-pronged strategy to improve educational outcomes that included provision of adequate resources and improving their utilization, strengthening governance and accountability, ensuring the participation of communities, and increasing the role of the private sector. To improve quality and accountability, the provincial government has: (i) expanded the role of parent/citizen. Community Board member chairs School Management Committees to monitor teacher attendance and school budgets, (ii) appointed new teachers on contract in specific schools, (iii) made new teacher recruitments based on merit, (iv) started testing the competency of teachers and provided remedial training, and (v) launched a five year rolling budget to improve school infrastructure.

KHYBER PAKHTUNKHWA

Minimum professional qualification for primary school teachers has been enhanced from PTC/CT to FA/F.Sc, ADE, BA/B.Sc, B.Ed/M.Ed. Working PTC/CT teachers have been directed to improve their qualification within three years. Teachers Training Institutions are providing Pre-Service Training to the prospective teachers. In-Service Training is also being provided to the school teachers. Supervision and monitoring of teachers is done by Education Managers and Officers.

Education Sector Reforms in Khyber Pakhtunkhwa

In 2002, Khyber Pakhtunkhwa embarked on a comprehensive reform program. The five pillars of the Provincial Reform Programme (PRP) constitute:

- Fiscal reforms,
- Public financial management reforms,
- Reforms to accelerate human development and improve service delivery of social services,
- Governance reforms, and
- Establishing an effective and transparent enabling environment for private sector development to accelerate economic growth.

The focal areas of interventions in human development are expressed in the Government of Khyber Pakhtunkhwa's medium-term objectives of the education sector reforms, including improving access to primary education and its quality, reducing gender and rural-urban disparities, and expanding the capacity at the secondary school level for continuing education beyond primary level.

BALUCHISTAN

Minimum professional qualification for primary school teachers has been enhanced from PTC/CT to FA/F.Sc, ADE, BA/B.Sc, B.Ed/M.Ed. Working PTC/CT teachers have been directed to improve their qualification within three years. Teachers Training Institutions are providing Pre-Service Training to the prospective teachers. In-Service Training is also being provided to the school teachers. Supervision and monitoring of teachers is done by Education Managers and Officers.

Education Sector Reforms in Balochistan

Balochistan Instructional Material Development and Training Cell (BIMDTC) was established in 1993 under the Directorate of Primary Education. The objectives of the BIMDTC were to (i) develop, test, and produce gender sensitive, quality instructional materials for all primary classes (K-5); (ii) provide on-the-job training to teachers in curriculum development, text writing, and desktop publishing; and (iii) based on National Curriculum Documents, develop and/or select primary textbooks and appropriate supplementary materials. Besides, several primary teachers were hired by BIMDTC on a contractual basis to write new books. Through rigorous in-service and cluster training sessions, teachers' confidence in understanding and subsequently utilizing the new books in class was developed. Mobile Female Teacher Training Units were also established to provide in-service training to female teachers. This new training program provides training to teachers at their workplace instead of bringing them to the training center.

Provincial Institute of Teachers Education (PITE), Quetta, Balochistan

Provincial Institute of Teachers Education (PITE), Quetta, is providing in-service Training to Primary, Middle and Secondary School Teachers. As a routine matter it conducts 1-3 week training for school teachers in subjects of Math, Science, English and ICT. Also it conducts training for Education Managers for development of teaching learning material. During 2012-13 it trained about 200 masters' trainers picking trainees from each district.

It has also a definite program for continuous professional development of teachers. PITE is also offering pre-service teaching program like B.Ed (Honors) and Associated Degree in Education (ADE). PITE has published training modules on National Curricula 2006 in order to familiarize the working teachers with the National Curriculum 2006.

Islamabad Capital Territory

Minimum professional qualification for primary school teachers has been enhanced from PTC/CT to FA/F.Sc, ADE, BA/B.Sc, B.Ed/M.Ed. Working PTC/CT teachers have been directed to improve their qualification within three years. Teachers Training Institutions are providing Pre-Service Training to the prospective teachers. In-Service Training is also being provided to the school teachers. Supervision and monitoring of teachers is done by Education Managers and Officers.

Professional development of teachers is a pre-requisite for providing quality education to the masses and it has positive impact on learning achievement of the students. Teachers are essential players in promoting quality education in schools. They work as catalysts of change. No education reform is likely to succeed without the active participation and ownership of Professional Trained Teachers. Therefore, teachers at all levels of the education system should be respected and adequately remunerated

In the Islamabad Capital Territory, efforts are being made to implement NEP 2009 with special reference to specific measures in respect of teacher's professional education, including pre and in-service training. Almost the same efforts are being made to provide professional development opportunities to the teachers. Similarly in Islamabad some other pre-service programs are being offered to the teachers. After getting professional qualification, teachers are eligible to get specific positions in Education Department. The in-service training is provided for professional development of serving teachers and education managers in the Capital Territory

Conclusions

- Minimum Professional qualification for primary school teachers has been enhanced from PTC/CT to ADE/B.Ed/M.Ed.
- Presently, serving PTC/CT Teachers have been directed to improve their qualification within three years.
- Teachers Training Institutions are providing Pre-Service Training.
- In-Service Training is also being provided to school teachers.
- Merit is observed while recruiting teachers in all provinces.
- Supervision and monitoring of teachers is also done by Education Managers and Officers.

THEMATIC AREA

Use of ICT for Enhanced Access and Learning

Over-all Country Picture

The Information and Communication Technologies (ICTs) are essential and have been popularized in the modern world especially in the industrial societies. The invention of ICT has brought a rapid change in all spheres of life ranging from social and political aspects of a region to the world economy.

To overcome new challenges, all institutions are aware of the importance of ICTs, and so they are developing policies to include ICTs in their curricula.

Therefore, it can be said that Information and Communication Technologies (ICT) have become common place entities in all aspects of life. Across the past twenty years the use of ICT has fundamentally changed the practices and procedures of nearly all forms of endeavor within business and governance.

Education is a very socially oriented activity and quality education has traditionally been associated with strong teachers having high degrees of personal contact with learners. The use of ICT in education lends itself to more student-centered learning settings. But with the world moving rapidly into digital media and information, the role of ICT in education is becoming more and more important and this importance will continue to grow and develop in the 21st century.

Effective use of ICT for Education has become important for quality education, along with ICT use in the teaching learning process; quality and accessibility of education; learning motivation and learning environment. Many countries now regard understanding ICT and mastering

the basic skills and concepts of ICT as part of the core of education, alongside reading, writing and numeracy. However, there appears to be a misconception that ICTs generally refer to 'computers and computing related activities'. This is fortunately not the case, although computers and their application play a significant role in modern information management, other technologies and/or systems also form part of the phenomenon that is commonly regarded as ICTs.

Information and communication technology (ICT) may be regarded as the combination of 'Informatics technology' and other related technologies, specifically communication technology. The various kinds of ICT products available and having relevance to education, such as teleconferencing, email, audio conferencing, television lessons, radio broadcasts, interactive radio counseling, interactive voice response system, audiocassettes and CD ROMs etc have been used in education for different purposes.

However, the use of information and communication technologies in the educative process has been divided into two broad categories: ICTs for Education and ICTs in Education. ICTs for education refers to the development of information and communications technology specifically for teaching/learning purposes, while the ICTs in education involves the adoption of general components of information and communication technologies in the teaching learning process.

Using ICT to enhance learning

a) ICT enhancing teaching and learning process

The field of education has been affected by ICTs, which have undoubtedly affected teaching, learning and research. ICTs have the potential to accelerate, enrich, and deepen skills, to motivate and engage students, to help relate school experience to work practices, create economic viability for tomorrow's workers, as well as strengthen teaching and help schools change. In a rapidly changing world, basic education is essential for an individual to be able to access and apply information. As a consequence, the use of ICT will not only enhance learning environment, but also prepare the next generation for future lives and careers. Changed

pool of teachers will come with changed responsibilities and skill sets for future teaching involving high levels of ICT and the need for more facilitative than didactic teaching roles.

The use of ICT in educational settings, by itself acts as a catalyst for change in this domain. ICTs by their very nature are tools that encourage and support independent learning. Students using ICTs for learning purposes become immersed in the process of learning and as more and more students use computers as information sources and cognitive tools, the influence of the technology in supporting how students learn will continue to increase. In the past, the conventional process of teaching has revolved around teachers planning and leading students through a series of four instructional sequences to achieve a desired learning outcome.

b) Enhancing the quality and accessibility of education

ICT increases the flexibility of delivery of education so that learners can access knowledge anytime and from anywhere. It can influence the way students are taught and how they learn as now the processes are learner driven and not teacher centered. This in turn would better prepare the learners for lifelong learning as well as to improve the quality of learning. One of the most vital contributions of ICT in the field of education is Easy Access to Learning. With the help of ICT, students can now browse through e-books, sample examination papers, previous year papers etc. and can also have an easy access to resource persons, mentors, experts, researchers, professionals, and peers-all over the world.

c) ICT enhancing learning environment

ICT presents an entirely new learning environment for students, thus requiring a different skill set to be successful. Critical thinking, research, and evaluation skills are growing in importance as students have increasing volumes of information from a variety of sources to sort through. ICT is changing processes of teaching and learning by adding elements of vitality to learning environments including virtual environment for the purpose. ICT is a potentially powerful tool for offering educational opportunities. It is difficult and may be even impossible to imagine future learning environments that are not supported, in one way or another, by

Information and Communication Technologies (ICT). ICT provides opportunities to access an abundance of information using multiple information resources and view information from multiple perspectives, thus fostering the authenticity of learning environment.

d) ICT enhancing learning motivation

ICTs can enhance the quality of education in several ways, by increasing learner motivation and engagement, by facilitating the acquisition of basic skills, and by enhancing teacher training. ICT has an impact not only on what students should learn, but it also plays a major role on how the students should learn. Along with a shift of curricula from “content-centered” to “competence-based”, the mode of curricula delivery has now shifted from “teacher centered” forms of delivery to “student-centered” forms of delivery. In such a situation, ICT provides ‘Motivation to Learn’.

Information and Communication Technology (ICT) and Education

The demands of the modern society represent a unique opportunity for education systems to respond to new demands. Schools that traditionally have taught students to store and recall information from specific content areas must now respond to the challenge of preparing young people for integration and success in societies and economies driven by the transformation of knowledge into new ideas and applications.

ICT and the EFA and Millennium Development Goals

Information and communication technologies are of paramount importance to the future of education. ICT in education initiatives that focus on the following areas are most likely to successfully contribute to meeting the EFA and Millennium Development Goals:

- **Increasing access through distance learning** – ICTs can provide new and innovative means to bring educational opportunities to greater numbers of people of all ages, especially those who have historically been excluded, such as populations

in rural areas, women facing social barriers, and students with disabilities.

- **Enabling a knowledge network for students** – With knowledge as the crucial input for productive processes within today's economy, the efficiency by which knowledge is acquired and applied determines economic success. Effective use of ICTs can contribute to the timely transmission of information and knowledge, thereby helping education systems meet this challenge.
- **Training teachers** – Large numbers of school teachers will be needed to meet the EFA and Millennium Development Goals for education. The use of ICTs can help in meeting teacher training targets. Moreover, ICTs provide opportunities to complement on the job training and continuing education for teachers.
- **Broadening the availability of quality education materials** – Network technologies have the potential to increase the availability of quality educational materials. Their interactivity and global reach allow for customized sharing of knowledge, materials, and databases, quickly and cheaply over long geographic distances. Furthermore, online resources offer teachers access to a vast and diverse collection of educational materials, enabling them to design curricula that best meet the needs of their students.
- **Enhancing the efficiency and effectiveness of educational administration and policy** – New technologies can help improve the quality of administrative activities and processes, including human resource management, student registration, and monitoring of student enrollment and achievement.
- However, although digital ICTs are quickly becoming more accessible, it is important to note that earlier ICTs continue to play a critical role in education worldwide. Access to films, videotapes, telephones, television or radio is still far more

commonplace than access to a computer or the Internet and World Wide Web.

Importance of ICT and National Education Policy

Pakistan follows a decentralized system of education administration with all academic institutions being under the purview of respective provincial administrations while the Federal government has the responsibility of developing the overall policy framework, curriculum, accreditation, and financial support for selected research activities. Education reform has been high on the government's agenda and the review process for the National Education Policy 1998–2010 was initiated in 2005, with the setting up of the policy review team to undertake the revision exercise. The new Education Policy 2009 is the culmination of that process. According to NEP 2009, following action plan has been discussed:

- Use of Information Communication Technologies (ICTs) in Education shall be in line with Ministry of Education's "National Information and Communication Technology Strategy for Education in Pakistan".
- ICTs shall be utilized creatively to assist teachers and students with a wide range of abilities and from varied socio-economic backgrounds.
- ICTs shall be used to strengthen the quality of teaching and educational management.

The policy recognizes several key constraints in the current education system including weak governance of the system, low resource commitment, and the lack of a uniform national education system resulting in uneven quality and parallel systems of education that are not available equally to all strata of society. The policy also stresses the importance of leveraging ICT to improve quality and access at all levels. Pakistan is one of the few countries in the South Asian region to formulate a specific National ICT Strategy for Education in 2005.

ICT to Strengthen the Quality of Teaching and Educational Management

The government proposes to use ICT to enhance teaching quality by supporting and reinforcing the use of innovative teaching practices. Teachers will learn ICT skills so as to integrate these into the teaching system. To enforce this, the government will take the following steps:

- Facilitate an environment for continuous learning by providing teachers with access to ongoing professional development.
- Support teachers in applying technology in a learner-centered context by modeling lessons in live classroom situations that other educators can hear or observe via radio or through taped/broadcast television modules.
- Provide content knowledge and curriculum support by providing internet access/CD ROM based software to schools, professional development centers, and teacher training institutions to help pre and in-service teachers expand their content knowledge.
- Provide teachers and educators with ICT tools that enable them to produce their own materials in local or regional languages.
- Use ICT for professional networking, mentoring, and monitoring by supporting teachers to create an archived body of knowledge that others can access.

ICT to Enhance Student Learning

The government envisages that ICT can enable teachers to improve pedagogy by providing the framework to create a constructivist learner-centered environment. It can also help students access self-paced learning. The following methodology will be employed:

- Upgrade the current curricula to integrate ICT in primary, secondary, and vocational education.
- Use ICT to supplement, enhance, or provide access to content particularly when textbooks and supplementary materials are scarce. This can be ensured by providing CD ROM-based content and Web-based activities to access digital resources and

online collections that might otherwise be unavailable. It can also be achieved by providing radio/audio and TV/video programs to present content in an interactive manner.

- Use ICT to adopt more authentic ways to evaluate students work.
- Use ICT to change pedagogical methods by giving students freedom to interact with ICT in ways that promotes creativity and problem-solving.

National Information and Communication Technology Strategy for Education in Pakistan (NICT): Elements and Action Recommendations

Like other developing countries in the region Pakistan has witnessed significant growth in the ICT sector. ICT is seen as a key potential driver of socioeconomic development, wealth generation and redistribution and creation of new jobs. A separate Ministry of Information Technology was created in November 2002, with the aim of building Pakistan's information technology competency in the 21st century.

The NICT Strategy contains six elements and corresponding action recommendations:

Element 1: Use ICT to extend the reach of educational opportunity:

Utilize ICT creatively to assist teachers and students with a wide range of abilities and from varied socio-economic backgrounds.

Action Recommendations

1. Determine the context and needs of the students, educators, and/or citizens whom you seek to serve.
2. Research uses of ICT including, and other than computers.
3. Invest in needs-based and best practice ICT models.
4. Develop funding mechanisms to cut the cost of ICT for education.
5. Initiate an awareness campaign.

Element 2: Apply ICT to strengthen the quality of teaching and educational management:

Use ICT to maximize opportunities for educators' continuous learning and to help educators understand and effectively use ICT.

Action Recommendations

1. View teachers' professional development as top priority.
2. Match ICT selection with teachers' specific needs.
3. Set guidelines for ICT training for teachers.
4. Select a strategic blend of professional development model based on research of innovative educational practices.
5. Provide training and resources for teachers to produce their own materials.
6. Provide follow-up and support.
7. Ensure that educators know how to teach using ICT.
8. Create a system of incentives and support for teachers to use ICT.
9. Establish a national educational portal.

Element 3: Employ ICT to enhance student learning:

Integrate ICT into schools and learning centers to support students' self-paced learning and provide them with chances to explore, investigate, reflect, learn social skills (such as collaboration, logical reasoning, and creative expression), and enhance self-esteem.

Action Recommendations

1. Reform curriculum guidelines.
2. Seek and develop content resources.
3. Improve national examination systems.
4. Make learner-centered instruction the focus.

Element 4: Developing complementary approaches to using ICT in education:

Support students and teachers in developing key ICT competencies (including sophisticated problem-solving and critical thinking skills) by treating ICT as a school subject, as well as a critical instructional tool.

Action Recommendation

Establish competency-based curricula and certification.

Element 5: Build on the current experiences of existing and successful ICT programs:

Gather, organize and provide access, share, and use for planning purposes national and international data on effective approaches to using ICT in education.

Action Recommendations

1. Establish an official clearing house system to gather and distribute information on effective ICT programs.
2. Ensure that information from the clearing house system reaches stakeholders.
3. Encourage an international exchange of information about effective ICT programs and best practices.
4. Monitor and evaluate Pakistan's ICT projects in order to identify and replicate effective models.
5. Facilitate the initiation and growth of ICT projects/approaches so that evaluation results prove to be effective.

Element 6: Develop capacity at the level of federal and provincial departments of education:

Form a new office of the government to represent the cause of ICT in Education and advise the Ministry of Federal Education and Professional Training.

1. Set up an office of ICT integration, a Technical Implementation Unit (TIU) within the Ministry.
2. Authorize the TIU to carry out key functions to advance the mission of the Ministry of Education.

PROVINCE-WISE SCENARIO

PUNJAB

Punjab Department of Education is encouraging use of IT for enhanced access and learning. As part of a concerted effort in this direction, it has established a special body namely Punjab Information Technology Board (PITB), Arfa Information Technology Center, which has assumed a unique role in the development of teaching and learning material and assessment. It has started a project of uploading science subject textbooks online.

- PITB has launched a special project namely 'e-learning. Punjab aims to facilitate and encourage the use of Information Technologies by providing digitized content, relevant supplementary resources and online assessment tools for students and educators. As a first step, digitized versions of textbooks of Biology, Physics and Chemistry for 9th and 10th grades and Science and Mathematics of 6th, 7th and 8th grades are being made available online along with links to supplementary material available on the Web. These online books are augmented with animation, simulation, videos and self-assessment exercises.
- In future, the digitized version of textbooks for all grades will be uploaded online as well as into laptops or tablets, or made available in the form of DVDs.
- PITB intends to establish fully equipped IT labs in Secondary and Higher Secondary schools in the first instance. The facility will be extended to all levels of schools in future.
- Chief Minister of Punjab has specially emphasized the use of IT for enhanced access and learning. That is why he has distributed laptops to thousands of students free of cost.
- Department of Staff Development (DSD) is imparting IT training to teachers through its specific training programs titled:

In-service & Induction Trainings imparted to Master Trainers, Primary School Teachers, Elementary School Teachers, Secondary School Teachers, Subject Specialist, and Education Managers. Use of IT is part and parcel of this training. Besides, DSD offers special IT Training to teachers who are supposed to teach students at grade 6-12. The purpose of this training is to facilitate these teachers to better comprehend the subject matters present in the curriculum and requiring use of computer.

- DSD itself is using IT extensively for the purpose of research, planning, monitoring and evaluation of schools, teachers and students.
- Computer Science is an optional subject in Secondary and Higher Secondary classes.
- Computer Science is a compulsory subject in 6th, 7th and 8th classes.
- All the High Schools have computer teachers.
- All of the Secondary Schools and 60% of the Elementary Schools have computer labs.
- Offices of the Secretary, Additional Secretary and Deputy Secretary, Punjab Department of Education are using IT extensively for two way access i.e. for receiving information from subordinate departments and officers and for passing instructions and orders to them.

- Punjab has two Director Public Instruction i.e DPI (Elementary) and DPI (Secondary). Their main duty is to ensure implementation of government instructions pertaining to teachers and schools. Both the offices are found using IT extensively. All concerned information is there in their office computers. Use of fax, phone and email is very common in their offices.
- All other offices having any concern with education were found using IT for their professional assignments.

SINDH

The information communication technology plays a vital role in enhancing efficiency of education system. Government of Sindh is making efforts to take benefit of this technology. Subject of computer is being introduced in 2014-15 from class 6th to 8th according to the national curriculum 2006. Moreover, Government of Sindh has also taken other steps/initiatives for implementation of ICT in the province.

- ICT academies are being established in 40 schools and colleges in 2013-14 so that students can take benefit from use of ICT in practical life.
- Electronic whiteboards have been deployed in various schools and colleges in order to facilitate teaching learning process in classrooms.
- Online video classes are to be started through distance learning in the near future in order to provide quality education to all the students in province.
- Through IT and science project 2005-2008 and in collaboration with CIDA, ICT labs have been established in 206 schools and 206 teachers were recruited for teaching the students in these labs.
- In collaboration with CIDA, 37 Computer Labs have been established in teacher training institutes so that in-service training may be provided to teachers through ICT.
- Promotion of ICT through Sindh Education Sector Plan has also been taken up in following areas.
 - Curriculum enrichment
 - Teacher training
 - Improved governance through ICT
 - Supervisor's tracking system.

- ICT labs have already been established in majority of secondary schools. Teachers have been provided ICT environment for application of ICT in classroom, up-gradation of current curricula to integrate ICT, use of ICT to supplement contents and enhance educational material etc. Several schemes have also been planned to start through distance learning program in 2014-15.

It is further stated that Government of Sindh is striving to achieve the target of EFA and Millennium Development Goals by 2015. Several steps have been taken to increase access to education, provision of quality education and remove disparities in education system in the Sindh province.

Hurdles/problems in ICT Policy implementation

The Government of Sindh is facing following problems in implementation of ICT policy in the province.

- Lack of infrastructure at school level, (power, network signals etc)
- Capacity issues of the human resource.
- Lacking accountability mechanisms
- Financial issues

The provincial government is facing financial problems, which can be removed if some international donor agency or federal government provides financial assistance for the infrastructure development for use of ICT:-

- Solar energy and satellite internet may be provided so that power shortage can be reduced and ICT can be implemented for teaching learning process.
- Teachers' Training may be provided for human resource development
- ICT may be used to enhance transparency and monitoring

KHYBER PAKHTUNKHWA

Government of Khyber Pakhtunkhwa is making all out efforts to turn the province into a hub of information technology and transparency.

The Federal Government has introduced mandatory Computer Education at Grade VI-VIII level in the country in the new scheme of studies, which is ready for implementation in the near future. However Computer Education is not an ordinary subject as it demands specific resources, for instance, well furnished computer laboratory etc, which is unfortunately lacking at the moment in a majority of government schools with the exception of few in the country/province. Similarly finding a qualified Computer Teacher is also a big concern.

Hence the standards and benchmarks set in the Computer Curriculum would not be achieved in a meaningful manner and imparting mandatory computer education at grade VI-VIII would be a mere dream in the absence of above facilities. The provincial government despite all its wishes has been able only in establishing some Computer Labs with IT Teachers in selected High/Higher Secondary Schools, but still a large number of schools are devoid of computer labs & teachers. A decision has to be made soon in order to ensure proper implementation of computer education as per the standards of new scheme of studies. It is very nice that the provincial government has directed Text-Book Board Khyber Pakhtunkhwa to develop Text-Book on Computer Education for Grade VI to VIII. Similarly the need is also to develop a Training Manual on Computer Education for the Teachers of Grade VI-VIII and Teacher Training in collaboration with INTEL, Pakistan Computer Bureau (PCB) Islamabad, UNESCO and USAID under Directorate of Curriculum & Teacher Education (DCTE), Abbottabad.

Teachers in Khyber Pakhtunkhwa have not yet been trained on Information Communication Technologies (ICTs). Realizing the importance of ICTs for improvement of facilities of education, provincial government has planned to train the teachers on ICTs utilization.

BALUCHISTAN

Except for a few urban centers of population, Balochistan is sparsely populated resulting in long distances between centers of population. Poor communication infrastructure and difficult security situation in the province have adversely impacted the process of implementation of a proper ICT policy for education. However Government of Balochistan Education Department is planning to explore options for ICT to ensure outreach of quality education delivery in Balochistan. Computer Science subject has been introduced as an elective subject at Secondary School Certificate level. In Balochistan out of 700 Secondary School only 250 Secondary School have computer laboratories and 150 Secondary Schools have computer teachers. Most of the schools in Balochistan are without electricity. So presently use of ICT for enhanced access and learning is not being properly utilized in schools in Balochistan.

Islamabad Capital Territory

For effective use of ICT for Education, and in the teaching learning process; quality and accessibility of education, learning, motivation and learning environment are essential. Federal Directorate of Education is encouraging use of IT for enhancing access to education and facilitating teaching learning process. In this regard efforts are being made to implement proposed actions in National Education Policy 2009. Computer Science is an optional subject in Secondary and Higher Secondary classes and it is a compulsory subject in 6th, 7th and 8th classes. All the schools have computer teachers and a majority of schools have computer labs to facilitate the teachers and students in taking benefits from ICT.

Conclusions

- Computer Science is a compulsory subject for Grade VI-VIII all over Pakistan except Balochistan. It is an optional subject for secondary classes in Islamabad and all the provinces of Pakistan.
- Information Technology (IT) teachers have been appointed in all the Secondary Schools of Punjab, Sindh and Islamabad. In Balochistan and Khyber Pakhtunkhwa IT teachers are also working in some schools.
- Computer laboratories have been established in all the Secondary Schools of Punjab, Sindh and Islamabad. These laboratories have also been established in some schools of Khyber Pakhtunkhwa.
- Information Technology (IT) training is also provided to the teachers of formal schools.
- Efforts are being made to utilize ICT creatively to assist teachers and students from varied socio-economic backgrounds to develop a wide range of abilities.

- Information Communication Technology (ICT) is being used to maximize opportunities for educators' continuous learning and to help educators understand and effectively use ICT.
- Efforts are being made to support students and teachers in developing key ICT competencies (including sophisticated problem-solving and critical thinking skills) by treating ICT as a school subject, as well as a critical instructional tool.
- Gather, organize, and provide access to, and share data on effective approaches to using ICT in education for planning purposes at national and international levels.

Chapter Seven

THEMATIC AREA

Development of Institutional Capacities for Assessing Learning Outcomes

Over-all Country Picture

Assessment is the process of identifying, gathering and interpreting information about students' learning. The central purpose of assessment is to provide information on student's achievement and progress and set the direction for ongoing teaching and learning. A policy could only be a success when the existing shortfalls are made the footing, the match with the resources is sought and the viable methods of implementing the policies are suggested and followed. Policies normally encompass the targets to be reached, highlight the gray areas and spell out the most tangible implementation strategies.

Assessment lies at the heart of the process of promoting children's learning. It provides a framework within which educational objectives are set and children's progress is expressed and monitored. Examinations are of two types (1) Internal examinations and (2) External examinations. Internal examinations are conducted by the institutions themselves while external examinations are those examinations which are conducted by an external authority. In Pakistan Federal Board of Intermediate and Secondary Education Islamabad conducts external examination for secondary and higher secondary level at federal level whereas Provincial Boards of Intermediate and Secondary Education, conduct external examination for secondary and higher secondary levels in their respective provinces.

Since the time of independence, seven different education policies have been implemented in the country. The main thrust of all these policies was to promote quality education and the improvement of pedagogy. Yet, the improvement in these areas has not been very satisfactory. In Pakistan, assessments do not judge real competence or genuine educational

accomplishment of the students. Instead, the Pakistani educational system encourages those who can best reproduce what they have learnt during lessons and fails those who are unable to do that. It seems as if the whole system of education revolves round examinations. Such types of assessment and evaluation are narrow in scope.

Examinations and assessments are an integral part of pedagogy which determines the destiny of students as well as learning for their life career. Examinations are usually held annually, and they are the main criteria to promote the students to higher grades or to retain them in the same grade. However, recently, a system of automatic promotion up-to grade-III has been introduced in some primary schools but not officially implemented. In the primary schools, examinations are conducted by the respective schools for each grade (I-V). However, at the end of the fifth year of the primary stage, a public examination is conducted by the Education Department for promotion to the next higher grade.

Another examination is held for the outstanding students to compete for the award of merit scholarships. Similarly, the examinations in middle schools (lower secondary (VI-VII) is held by the individual schools but there is a public examination at the end of grade VIII conducted by the Education Department for promotion to the next higher grade and award of scholarships. Regional Board of Intermediate and Secondary Education (BISE) conduct the examinations for assessing the secondary and higher secondary students. Secondary school begins from grade VI and covers up to grade X (most of the high schools cover middle and secondary education) and students are required to pass a board examination. Upon completion of grade IX, students are expected to take a standardized test in each of the first parts of their academic subjects. The boards of examination again conduct tests of the second parts of the same courses at the end of grade X. At the successful completion of these two examinations, students are awarded a Secondary School Certificate (SSC). This is popularly known as the 'matriculation certificate' or 'SSC' for short.

Thus, for stakeholders, such as schools, the objective is to ensure that their students pass the examination with good grades and bring a good name to the school. For some schools, teachers, and students, passing of examinations with highest positions becomes a question of prestige.

Teachers teach for testing, rather than for learning. The assessment system of examinations reinforces approaches to teaching that reward memorization. The more the reproduction, the better and higher are the scores or marks awarded by the examiners. Consequently, it is presumed that in the current examination system, learners' learning outcomes are absolutely ignored. However, memorization is measured extensively. Accordingly, it is apparent from the above that the assessment system suffers from multiple deficiencies such as fostering rote-learning, and not adopting critical or analytical approaches for assessing learners. The Ministry of Education (2009: 41), has declared that student performance shall, in future, be based on assessing competence in a specialized area that requires a given skill set. There shall be periodic reviews of the assessment system. Multiple assessment tools in addition to traditional examinations shall be explored, to ensure the right balance between the uses of formative assessment approaches combined with the summative approach of high-stake examinations.

In 2003, BISEs in Pakistan replaced the "composite scheme" of SSC examination with the "split scheme". There are two different types of examinations prevailing in the country. (In the composite scheme, examinations are conducted after two years while in the split scheme, the same examination is split into two parts, Part-I (Grade IX) after first year and Part-II (Grade X) after completion of second year. Under the composite scheme of examination the total marks were 850 and now in the split system of examination the total marks are 1050.

It was observed by different experts that there has been an increase in the incidence of recurrence of questions and selected material is tested again and again in our public examinations. This leads toward selective studies because the understanding of a little content helps the students to get good marks in the final examination and nobody seems to take this fact seriously. Assessments in examinations mainly focus on easy, straight and very simple questions and they ignore high levels of cognition involved in such items as comprehension, analysis, synthesis and evaluation. In this situation, students keep focusing on retention and rote memorization as examination tactics. In Pakistan only one text-book is provided to the primary and secondary school students for each subject. That's one reason why the quality of teachers is not satisfactory and the worth of our output at

this level is inadequate. This suggests that special skills are required to assess the learning outcome.

Comprehension questions are useful for checking understanding particularly if they are of the type which requires the students to actively seek-out the answer and formulate it themselves, rather than simply reproduce a section of the text – moreover the questions do not encourage the personal involvement of the learner which is an important factor in motivating students.

Accordingly, it is presumed that in order to measure students' comprehension, question types have to test high order instead of low order thinking skills. This will not only require students to simply locate the answer in the texts using only low order skills, but also make them read between and beyond the lines in order to become independent and proficient readers. In addition, they will become proficient in interaction with texts, such as narrative, expository, argumentative, persuasive, and informative or a combination of text types.

Assessment can be used to evaluate the system's overall efficiency as well as students' performance. Secondly, it provides feedback for improvements at all tiers starting from changes in the classroom to improvements in the national systems. Keeping in view the crucial role of examinations in determining the impact of pedagogy, public examinations and assessment in Pakistan are found to have more demerits than merits. Moreover, modern assessment techniques are not being used to measure students' achievements and hence dependency on traditional learning processes yields a low quality of education in the country.

Examination questions are repeated at least every three to five years and hence questions can be predicted. There are model papers, or guess papers and guides available in the market with readymade answers based on the question papers of the previous five years. Teachers and students tend to rely on such guides and students commit their content to memory. Assessment questions in the papers contain only a combination of objective and subjective types of questions. Regurgitation seems to be the only key for students to pass the examinations rather than creative thinking and independent analyses. The irony is that those students who can reproduce

better score higher marks and this affects lecture methods and curriculum-based teaching approaches.

National Education Assessment System (NEAS)

The NEAS obtains a representative sample of measures of student achievement in key curriculum areas at regular intervals and at selected grade levels. The purpose of the exercise is to assess the achievement of the education system through national aggregation of individual student performance. Data on the performance of students on various sub-domains of curriculum can point to strengths and weaknesses within the curriculum areas.

Simultaneously with data on student achievement, information is also collected on correlates of learning outcomes. Any desired combination of correlates may be chosen from amongst student-related, school-related or teacher-related factors. Information on how student outcome is related to these factors can help policy-makers to identify and focus upon those which are likely to contribute to improvements in student achievement levels via examination assessment.

Analyses of data on sub-domains of curriculum and correlates of learning outcomes provide insight into how intended curricula are implemented in schools and what factors are affecting student learning. Learning assessment data provide an indication of the state, efficiency, or performance of the education system. Learning assessment serves the following purposes:

- Provides pertinent data to guide policy-makers in selection of priorities in curriculum, in allocation of resources, and in designing teacher-training strategies;
- Provides accurate data on changes in level of student achievement over years to substantiate or refute assertions pertaining to lowering of educational standards; Information on variables affecting student outcome can help in assessing the impact of in-service training, supervision procedure, emphasis on different curriculum content and language instruction, etc; as

well as introduce accountability in the system and help bring about cost efficiencies by identifying failing features of the existing system or by providing evidence to support more effective alternatives.

- The effectiveness of the NEAS depends on the relevance of indicators selected, quality of data collected, and validity of analyses. In both, examination and learning assessment data are collected on student achievement levels and used for improvement of examination assessment in education. The examination data are used by teachers both for the grading of students as well as improvement of the quality of their instruction. Learning assessment data, on the other hand, are used by policy makers and planners for improvement of the school system.

NEAS was established to undertake systematic evaluations of student learning achievement across Pakistan and to share the analytical results with both policy makers and practitioners to inform the education quality reform process. With data that are comparable across regions and over time, NEAS can identify gaps and bring about improvements in the curriculum, teaching and classroom support practices, as well as in the development of examination and assessment systems. For NEAS to be established as a student assessment system on par with international standards, several key steps towards institutional strengthening, capacity building and improvement in technical quality and processes should be undertaken. The following are required:

- Further investment in the technical proficiency of key staff is required, in both specialized skills (item writing, sampling, test procedures) and core expertise (report writing, comparative analysis);
- This will facilitate improvements in test and instrument design, and will support robust research and analysis. Sharing of results and findings with primary stakeholders, particularly teacher trainers, textbook developers and policy makers is important;

- Deeper understanding is needed of the assessment process and stronger linkages between assessment systems and other education departments will facilitate better-informed and strategic use of assessment information for improvement in student learning.
- The longer term sustainability of NEAS will depend not only on its establishment as an autonomous body but also on the degree of integration between the federal and regional assessment centers so that cross-learning and implementation of best practices is facilitated. With continuous improvements in test instruments and key technical skills, NEAS will be able to track overall system efficiency as well as individual student performance, and identify key areas for intervention that will lead to improvement in the quality and effectiveness of the education system.

PROVINCE-WISE SCENARIO

PUNJAB

- Punjab Examination Commission (PEC) has the mandate to assess SLOs of the students of grade-5 and grade-8 throughout Punjab. PEC, therefore, conducts exams for these levels annually. General reputation regarding effectiveness of PEC for assessing SLOs has not been found satisfactory. The whole process and methodology needs to be revamped. The matter needs to be examined thoroughly by conducting a specific research study and getting input from all the stakeholders specially working teachers and education managers.
- In Punjab, nine (9) Boards of Intermediate and Secondary Education (BISEs) have been set up for assessing SLOs of the students of grades 9-12. In its jurisdiction each Board conducts annual examination for each grade from 9-12. For making assessment of SLOs there are only two tools i.e. Question Paper and Lab Practical Works in four science subjects.
- The Boards have set certain criteria to prepare Question Papers. So far, assessment is mainly textbook-contents based and not curriculum based. Students are supposed to exhibit their learning outcomes within three hours examination. Evaluation of performance of students is made by the selected working teachers. In order to standardize the performance of high-performers Inter-Board evaluation is also got done. The Boards feel handicapped because they do not have well trained paper setters and evaluators. The Lahore BISE has arranged a few training sessions regarding paper setting and evaluation, but other Boards are not doing so.
- It has been observed that there is great need to provide specialized training occasionally to those who are supposed to set question papers and those who are to evaluate performance.

- The formative assessments and annual assessments for promotion to next grade of students in grades 1-4 and 6-7 are made by concerned schools themselves.
- Department of Staff Development (DSD), Lahore has introduced a system for monthly assessment for grade 3-5 and is implementing it successfully. DSD conducts six assessments in one academic year and on the basis of outcomes of these assessments they prepare ranking of concerned teachers.

SINDH

The government of Sindh has established a number of institutions and developed the capacity for assessing learning outcomes of the students. There are various methods and mechanisms of assessing the students' achievement. From grade 1-8 every school has its own mechanism of evaluation of the students such as periodical examination/ first term/ second term and third term for promotion of the students to next higher grade. On the basis of certain basic criteria/passing marks every school head has authority either to promote the student or retain the student in the same class.

Secondary education from grade 9-12 is under the jurisdiction of various Boards of Intermediate and Secondary Education. All BISEs have sufficient numbers of trained paper setters, operational staff, evaluation personnel for paper marking; result compilation etc. Similarly, required physical resources are available with all Boards functioning under the provincial government.

Simultaneously Provincial Education Assessment Centre (PEAC) is also working on learning outcomes of the students. Sample based learning achievement studies and large scale contents based assessments were conducted with the following objectives:

- Diagnostic assessment to identify strengths and weaknesses of teaching learning outcomes and assessment of school environment and factors affecting student learning achievement.
- Provision of feedback to stakeholders and improvement in quality of education.

The findings of these researches were used for providing in-service training to teachers in the province.

Future strategies for improvement

The government of Sindh is taking following steps for assessing students learning outcomes:

- i. The provincial assessment system will be established at PEACs Sindh, and the Student Achievement Test items from grade I-VIII will be developed.
- ii. BISEs in Sindh province are working closely with PEACs for Student Achievement Test items from grade IX-XII.
- iii. A permanent institutionalized system will be established in term of technical and human resource development from regular budget for the assessment of learning outcomes/activities.
- iv. PEAC Sindh will be strengthened by creating new posts and sub-offices at district headquarters for technical support of district education department.

Resources required for capacity building of institutions

The institutions working for assessing learning outcomes of students are facing financial problems in the professional development of concerned personnel and providing equipment to these institutions. It is proposed that donor agencies may be invited to provide resources for developing capacity of these institutions for assessing learning outcomes of the students.

KHYBER PAKHTUNKHWA

In Khyber Pakhtunkhwa, eight (8) Boards of Intermediate and Secondary Education (BISEs) have been set up for assessing SLOs of the students of grades 9-12. In its jurisdiction each Board conducts annual examination for each grade from 9-12. For carrying out assessment of SLOs there are only two tools i.e. Question Paper and Lab Practical Works in four science subjects.

Different processes of assessments conducted by institutions are:

- Multiple sets of question papers are prepared
- Papers are printed one day before examination / assessment
- Papers and exam material are provided early in the morning at the exam centre
- Three officers are responsible for maintaining secrecy
 - Chairman BISE
 - Controller of Examinations
 - Composer/Proof reader
- Papers are marked on the premises of BISEs
- Examiner must be a subject teacher of a particular subject
- Assessment process is monitored through Close Circuit (CC) camera by Chairman BISE, Peshawar.

Boards have certain criteria to set a Question Paper. So far, assessment is mainly Textbook- contents based and not curriculum based. Students are supposed to depict their learning outcomes within three hours examination. Evaluation of performance of students is made by the selected

working teachers. In order to standardize the performance of high-performers Inter-Board evaluation is also got done.

Satisfaction level of the institution

- Satisfaction level of the institution was found satisfactory in respect of Institutional Capacities to assess Learning Outcomes as trained paper setters, operational staff, evaluation personnel, result compilation staff and report writing personnel were available.
- It was also found that physical resources in terms of halls, furniture, lighting, drinking water and other related audio visual aids and facilities were satisfactory.
- Availability of Financial Resources is more than 90% of the requirement.

Following tools are applied to assess Learning Outcomes (knowledge, comprehension/under-standing, application, analysis, synthesis, evaluation):

- 20 % objective type questions(from textbooks) are given
- 30 % short-answer/short note are given
- 50 % essay type questions are used

However, there is one drawback which has not yet been addressed. Most of the question papers cover only knowledge/comprehension while the cognitive aspects such as application, analysis, synthesis and evaluation are generally missing except in subjects carrying practical exams.

Internal and External Assessment

Internal assessment system is weak and non-systematic. Previously there used to be formal grade 8th (Middle) examination by a special Board in the DCTE. One indicator to measure the quality of learning assessment is rate of promotion from Grade I-V which is 87% and Grade VI-VIII which is 85%. In Grade IX students are subjected to first formal external assessment which is done by B.I.S.E. Pass percentage at the end of 9th

class was 54% in March, 2011. Strategy is being developed to introduce Third Party Assessment at grade 5 and grade 8, in phases.

Schools

The formative assessments and annual assessments for promotion to next grade of students in grades I-V and VI-VIII are made by concerned schools themselves. There is no separate set up for conducting external examination for grades V-VIII.

Role/Contribution /Achievements of Provincial Education Assessment Centre (PEAC):

The Provincial Education Assessment Centre (PEAC) in Khyber Pakhtunkhwa was established with the purpose of developing procedures to institutionalize the plan “to build assessment capacity at the school, provincial and federal levels to measure learning outcomes and improve the quality and effectiveness of program interventions”. This is a step towards institutionalization of a homegrown assessment mechanism in Khyber Pakhtunkhwa.

BALUCHISTAN

Provision for three categories of assessment exists in the education sector: internal, external and diagnostic. In Balochistan province teachers are responsible to conduct internal assessments within the schools. The Directorate of Schools (DoS) conducts scholarship examinations at the end of 5th and 8th classes. This scholarship examination is not compulsory for all students of 5th and 8th classes. School administration and teachers conduct annual examination up to class 8. Board of Intermediate and Secondary Education conducts Secondary and Higher Secondary school examinations. The Provincial Education Assessment Centre (PEAC) has the mandate for system wide diagnostic assessments.

In Balochistan, currently the routine assessment system (BISE, DoS and internal assessment in schools) lack standards and are criticized for inducing rote learning in the classrooms. Neither the teachers in the classroom nor the examination staff employed by the BISE receive training in developing assessment tools. They have no understanding of the curriculum and examinations are based purely on the textbooks. There is lack of trained paper setters, evaluation personnel and result compiling staff. Physical environment in examination halls is also not satisfactory.

PEAC had conducted its last assessment in 2012 and now no funds are available to undertake this function in Balochistan.

Evaluations are the most critical influence on the teaching learning process in the classroom. The Government of Balochistan Education Department plans at changing the current approach and improving the quality of assessment at both the school level internal examinations and external level BISE and Directorate of Schools examination as follows:

- To improve the quality of examinations at all levels shift away from testing of memory to assessment of critical analytical ability.
- Shift from textbooks based examinations to curriculum based ones

- Ensure credibility of public examination at all levels.
- Enhance provincial capacity to develop and conduct quality examination.
- Develop provincial capacity to conduct diagnostic assessments to support decisions on systemic improvement.

Moreover, the Government of Balochistan Education Department will adopt following strategies in future to develop institutional capacities for assessing learning outcomes.

- To train current set of teachers for assessment based on curriculum
- Training on assessment in the pre-service teacher education program
- Standards for assessments will be developed at input, process & output levels
- Eradication of cheating in examinations
- To enhance capacity of BISE to conduct quality examinations
- To develop Balochistan Education Commission (BEC) for conducting 5th and 8th class examinations of all the public and private schools.

Islamabad Capital Territory

Similar to the provinces all heads of schools organize periodical/ first, second and third terms examination in their respective schools from grade I-VIII to assess students' learning outcomes. Moreover, Federal Directorate of Education (FDE) also organizes centralized examination for 5th and 8th graders for promotion to the next higher grade.

Federal Board of Intermediate and Secondary Education

Federal Board of Intermediate and Secondary Education (FBISE) is responsible for the academic plans and conduct of exams at the Secondary and Higher Secondary levels in Islamabad as well as in other parts of the country and abroad for those schools which have affiliation with it.

There are different processes of the assessment conducted by the institution:

- Multiple sets of Question paper are prepared
- Papers are printed one day before
- Papers and exam material are provided early in the morning at the exam centre
- Three officers are responsible for maintain secrecy
 - Chairman BISE
 - Composer/Proof reader
 - Controller of exam
- Answer books are assessed in the premises of BISE
- Examiner must be a subject teacher of a particular subject

Assessment process is monitored through Close Circuit camera by Chairman BISE.

Present Assessment System with reference to the practice prevailing in the country is Text-books i.e. Contents based Assessment and Large Scale Assessment.

National Education Assessment System

NEAS was established to undertake systematic evaluations of student learning achievement across Pakistan and to share the analytical results with both policy makers and practitioners to inform the education quality reform process. With data that is comparable across regions and over time, NEAS can identify gaps and bring about improvements in the curriculum, teaching and classroom support practices, as well as in the development of examination and assessment systems. For NEAS to be established as a student assessment system at par with international standards, several key steps towards institutional strengthening, capacity building and improvement in technical quality and processes should be undertaken.

Conclusions

- In Pakistan, assessments are usually held annually and they are the main criteria to promote the students to higher grade or to retain them in the same grade.
- From grade I-VIII examination is conducted by school management in Sindh, Khyber Pakhtunkhwa and Balochistan. In Punjab and ICT for grade I-IV and VI-VII examination is conducted by school management. Punjab Examination Commission conducts examination of grade V and VIII of all schools at provincial level in Punjab. Federal Directorate of Education conducts examination of grade V-VIII of all schools in Islamabad.
- Terminal Examination is also conducted in all the schools from grade I-VIII.

- Regional BISEs conduct the examination for assessment of secondary and higher secondary students. At the successful completion of these examinations, students are awarded Secondary School Certificate (SSC) and Higher Secondary Certificate (HSC).
- There has been an increase in the incidence of recurrence of questions and selected material is tested again and again in public examinations of Pakistan. This leads towards selective studies because understanding of a little content helps the students to get good marks in the final examination.
- Assessment in examinations mainly focuses on objective and subjective type questions and they ignore high level of cognition involved in such items as comprehension, analysis, synthesis and evaluation.

BIBLIOGRAPHY

- 18th Constitutional Amendment (2010); Issues and Challenges in Curriculum and Standards, work supported by DFID, I-SAPS
- Afridi, K.A. et al (n.d); The Contribution of Regional Institutes for in-service Teachers Training: A study from Khyber Pakhtunkhwa
- European Agency for Development in Special Needs Education (2009); Key Principles for Promoting Quality in Inclusive Education, Recommendation for Policy Makers
- Fazal, R. (2012); Readiness for Inclusion in Pakistani Schools: Perception of School Administrators
- Government of Khyber Pakhtunkhwa (2012); Education Sector Plan (2010-2015), Department of Elementary & Secondary Education, Peshawar
- Government of Khyber Pakhtunkhwa (2013); Elementary & Secondary Education Department, Annual Statistical Report of Government Schools, Peshawar
- Government of Pakistan (2013). Annual Report: Pakistan Education Statistics 2012-2013. - Islamabad: NEMIS/Academy of Educational Planning and Management.
- Government of Pakistan (2013). National plan of Action to Accelerate Education – Related MDGs, 2013-2016. Achieving Universal Quality Primary education in Pakistan. - Islamabad: Academy of Educational Planning and Management.
- Government of Pakistan (2014). Pakistan Education for All Review Report 2015. - Islamabad: Academy of Educational Planning and Management.
- Government of Pakistan; National Education Policy (2009), Ministry of Education Pakistan, Islamabad.
- Hameed, G. (2013); Teachers' view about curriculum change at Primary level: A case study of Urban Girls Primary Schools, International Journal of Academic Research and Reflection, Vol. 1 No. 2: ISSN 2309-0405 (online) ISSN 2308-8249 (print)
- Jamil, R.B. (2009); Curriculum Reforms in Pakistan- A Glass Full or Half Empty? Paper presented at the seminar on School Curriculum Policies and Practices in South Asian Countries. NCERT Delhi, India

- Khattak, G.S. (2012); Assessment in Schools in Pakistan, SA-e DUC Journal, Vol 9, No.2
- Majeed, A. (n.d); Key aspects of new Curricula 2006
- Malik, A.B; Education Matters: Policy Analysis and State of Education in Punjab Province in Punjab ISBN 978-969-510-419
- Mikree, F. (2011); The Roles of Information Communication Technologies in Education. Review Article with emphasis on the Computer and Internet
- Pasha, S. (2012); Readiness of Urban Primary Schools for Inclusive Education in Pakistan, Journal of Research and Reflection in Education, Vol6, No.2 pp113-128, <http://www.ue.edu.pk/journal.asp>
- PCE, Pakistan a Coalition for Education (2012). Right to Education: An alternate implementation framework for RTE: Islamabad. SAQE.
- UNESCO. (2012); Education Policy Analysis: Report of Khyber Pakhtunkhwa (KPK), Elementary and Secondary Education Department (EMIS), Government of Khyber Pakhtunkhwa (KPK), Peshawar.
- World Data on Special Education; (6th Edition), 2006/07

Webliography/websites

- <http://www.kpese.gov.pk/PITE.html>; Retrieved 05-05-2014.
- <http://results.urduwire.com/boards/kpk/bisep/>; Retrieved 05-05-2014.
- <http://www.khyberpakhtunkhwa.gov.pk/Departments/SocialWelfare/Special-Education.php>; Retrieved 05-05-2014.
- <http://pu.edu.pk/images/journal/pjlis/pdf/pjlis-13-fatima.pdf>; Retrieved 05-05-2014.
- <http://www.nyu.edu/classes/keefe/waoe/amins.pdf>; Retrieved 05-05-2014.
- [http://www.basiced.org/wp-content/uploads/Factsheets/Technology fact sheet.pdf](http://www.basiced.org/wp-content/uploads/Factsheets/Technology%20fact%20sheet.pdf); Retrieved 05-05-2014.
- http://www.infodev.org/infodev-files/resource/InfodevDocuments_882.pdf; Retrieved 05-05-2014.