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# The Impact of Quality Indicators on Quality of Primary Education in Khyber Pakhtunkhwa

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Education plays a major role in the development of a state. It is extensively accredited that quality of primary education is the solo most important tool in strengthening human capabilities and achieving the desired goals. The major purpose of the study was to know how the quality indicators impact the quality education in government boys and girls primary schools of the selected five southern districts of Khyber Pakhtunkhwa, Pakistan. All the head teachers and teachers of government primary schools of southern districts of Khyber Pakhtunkhwa constituted the population of the study. The sample of the study was consisted of 100 head teachers (50 male and 50 female) and 300 teachers (one hundred & fifty male and one hundred & fifty female). The study was a survey type in nature. To collect the relevant information on the selected quality indicators (quality of learning environment, quality of contents, quality of process, and quality of outcomes) a self-developed questionnaire was used. Statistical tools chi square test of goodness of equal probability and chi square test of independence were used to analyze the data. In the light of conclusions it is recommended that separate staffrooms should be constructed for teachers, sufficient books for learners and supplementary/allied reading materials for teachers should be provided well in time, students should be encouraged to ask relevant questions during the teaching. Furthermore, examination and assessment systems should be impartial and transparent. Therefore examinations conducting bodies/ authorities should be appointed on merit basis, papers or assessment work may be done by expert teachers, supervisory staff may necessarily be nominated on best performance basis, and evaluation process might to be administered by skilled personals.

Key Words: Quality education, learning environment, curriculum, evaluation system, primary education.

# Introduction

Primary education holds central position in the whole educational system. The educationists consider this stage as a backbone or foundation stone of the whole educational system, while sociologists consider it as an effective weapon of social reforms. It can be said that primary education is closely related with informatory and initiative stage of the society (Mirza, 2003).

Primary education is considered to be much urgent and essential element for the advancement of the countries all over the world. It is the key sector/phase of the entire education system. On one side it provides a literate workforce for the country and on the other side it works like a feeder for the next coming stages of education which directly or indirectly depends upon the quality of primary education which is the initial stage. Due to which skilled, professional and trained work force will produced which will work actively in every walk of life especially in political, social or economic fields(Brown, 1998-99).

Quality of primary education has its own importance and value for all of us. If we give primary education a prominent place and status then we can expect from it that it will definitely add to our

progress and prosperity directly or indirectly. In simple words quality of primary education plays the role of bridge to all next coming stages of education. Therefore the progress and development of our nation depends directly on the quality of primary education. There is no second opinion, but only quality education can prepare students who can face the challenges of global market. Primary education is criticized over many forums that it has no quality and producing students without any knowledge and understanding of basic concepts. Quality of education for all has emerged as one of the most desirable goals throughout the world. One of the six goals, outlined by the World Education-Dakar- Framework for Action (2000), is related to the improvement of "all aspects of quality education" in order to achieve the identified learning outcomes (UNESCO, 1998).

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It is difficult to define quality of education precisely mainly because of the complex nature of teaching-learning process and large number of stakeholders involved in schooling (Mirza, 2003). Various authors/ researchers have identified different determinants of education quality. Cheng and Cheung, (1997) define quality of education as a set of elements containing input, process and output of education system (Adams,1993). Framework of quality consists of institution' reputation, resources/ input, process, content and outputs/outcomes. According to Santos, (2007) a traditional school quality model is characterized by test scores and various inputs including student family background, school characteristics, teacher characteristics and student's innate ability. The indicators of education quality identified by Thaung (2008). include learners, teachers, content, teachinglearning processes, learning environments, and outcomes. As a matter of fact, the value of Thaung's (2008) model is yet to be discussed and analyzed in the academic literature. Various factors including curriculum, delivery of content, learning environment, supervision, and administration of academic facilities contribute to the quality of education, (Iqbal, 1996). Another significant model of quality of education has been given by UNICEF, (2000) which comprises five dimensions i.e. quality learners, quality learning environments, quality content, quality processes, and quality outcomes.

- a) Quality of learners means students' good health and nutrition, early childhood psychosocial development experiences, regular attendance, and family support for learning. Learners who are healthy, well-nourished and ready to participate and learn, and supported in learning by their families and communities
- b) Quality of learning environments means physical elements (e.g. school facilities, class size etc.), psychosocial elements (e.g. safe environment, teachers' behavior, discipline policies, nonviolence etc.), and service delivery (e.g. health services). Environments that are healthy, safe, protective and gender-sensitive, and provide adequate resources and facilities.
- c) Quality of contents means student-centered and standard based curriculum, uniqueness of local and national content, focus on literacy, numeracy, and life related skills. Content that reflects in relevant curricula and materials for the acquisition of basic skills, especially in the areas of literacy, numeracy and skills for life, and knowledge in such areas as gender, health, nutrition.
- d) Quality of processes means indicators relating to teachers and teaching (e.g. teachers' competence, support for student-centered learning, active participation based teaching methods, teachers' working conditions etc.), supervision and support (e.g. administrative leadership, effective use of technology, diversity of processes and facilities

- etc.) Processes through which trained teachers use child-centered teaching approaches in wellmanaged classrooms and schools and skilful assessment to facilitate learning and reduce dispari-
- e) Quality of outcomes means students' achievement in literacy and numeracy, life skills, health outcomes, outcomes sought by parents, community participation, and learners' confidence. Quality of education assumes that existence of adequate physical infrastructure is much urgently needed. It also assumes that such quality infrastructure should not be compromised by any means for the institution. The quality of infrastructure of the internal & external environment is closely related to the quality of education. Investments in the development of the physical facilities of the institution go a long way in improving quality education. Basic facilities like school building, electricity, laboratories drinking water are the basic requirements for education. Without these basic facilities quality education is very difficult and almost impossible. For quality education, these facilities are compulsory and mandatory. Inadequate facilities are one of major challenge and hurdle in the way of quality education. Well organized and fully equipped institutions smoothen the way of quality education (UNESCO, 2000).

Quality of education and research assume that existence of adequate physical infrastructure is much needed. The quality of infrastructure of the internal & external environment is closely related to quality of education. Investments in the development of the physical facilities of the institution go a long way in improving quality education. Without these facilities education is very difficult. For quality education, these facilities are compulsory. Inadequate facilities are one of the challenges in the way of quality education.

As Memon (2003) argues that the above mentioned framework of the quality education given by the UNICEF (2000) appears to be more viable and relevant if specific criteria are outlined to assess the quality of education.

Since today at primary level these fundamental qualities are badly missing in majority of the primary level institutions so, we intend to highlight those factors which are responsible for such low quality of education at primary level and make sure how these influencing factors can be achieved within the limited recourses.

This study will also helpful need to determine which of the quality factors will be best fit and suitable to help in improving the quality of primary education and what should be taken or put on top priority, or in other words there absentia may causes low quality of primary education.

The findings of this study will help the policy makers, stakeholders and curriculum developers while framing the curriculum for primary level and how to increase literacy rate and maintaining quality. This study will highlight the status of quality indicators (1- Quality of learning environment.2 -Quality of contents.3- Quality of process.4- Quality of outcomes) at primary level in Khyber Pakh-

## Objectives of the Study

This study was conducted to find out the impact of different quality indicators i.e (teaching methodologies, curriculum, physical infrastructure and assessment and evaluation system) in the primary schools of Khyber Pakhtunkhwa Pakistan.

## Hypotheses of the Study

This study was guided by one main and four sub null hypotheses as follows:

 $H_01$ - There is no significant difference between the perception of male and female teachers regarding the status of selected quality indicators for their schools.

H<sub>0</sub>1 (a)-There is no significant difference between the perception of male and female teachers regarding learning environment available in primary schools.

H<sub>0</sub>1 (b) -There is no significant difference between the perception of male and female teachers regarding course contents available in primary

 $H_01(c)$ -There is no significant difference between the perception of male and female teachers regarding quality of process in primary schools

H<sub>0</sub>1(d)-There is no significant difference between the perception of male and female teachers regarding quality of outcomes in primary schools.

tunkhwa and also will explore the status of quality indicators for boys and girls of primary schools separately which will be helpful in making specific decisions to improve the quality in weakened areas.

#### Method

The study was descriptive and survey type in nature. All the teachers working in the government primary schools of the five selected southern districts of Khyber Pakhtunkhwa Pakistan constituted the population of the study. The sample of the study was comprised of randomly selected 400 teachers from randomly selected 100 schools of the southern districts of Khyber Pakhtunkhwa using equal proportion of allocation technique for male and female teachers. For collection of data, researchers developed a questionnaire consisting of 4 facets as identified by UNESCO i.e. (quality of learning environment, quality of contents, and quality of process and quality of outcomes) each one comprising of 10 items. Five point Likert scale i.e (SA= strongly Agree, A=Agree, U= Undecided, DA= Disagree and SDA=Strongly Disagree) was used. The validity of the questionnaires was checked by 15 educationists and expert and Reliability coefficient was 0.83 using Cronbach alpha value by 40 teachers and head teachers through pilot testing before administering to the sample. The data were entered in SPSS-16. Data collected through the above mentioned research instruments was tabulated, analyzed according to the objectives of the study using chi square test of goodness of equal probability and chi square test of independence. The sampling frame is given in table1.

Table 1: Sampling Frame

Teacher category	School category	Population	Sample	Total sample
Head teacher	Boys	2283	50	
	Girls	2283	50	100
Teacher	Boys	4310	150	
	Girls	4310	150	300
Total		13168	400	400

## **Findings**

The respondents were significantly in favor of all the areas selected regarding the quality of learning environments as an indicator of quality education with different strength of chi square value for all 10 indicators (availability of teaching kits, water facility, boundary walls, toilets, furniture's, school building ,classrooms, play grounds, and separate staffrooms) Obtained frequency is significantly in the favor of the indicators as compare to the expected frequency (80) at 0.5 level of significance (see table 2).

Table 2: Quality of Learning Environments

S.No	Facets/parameters	f	SA	A	UD	DA	SDA	$X^2$	P
1	Teaching kits	О	272	102	16	5	2	666.175	0.00*
		e	80	80	80	80	80		
2	Water facility	0	318	69	8	5	0	659.47	0.00*
		e	90	80	90	80	80		
3	Boundary walls.	0	302	81	9	7	1	823.7	0.00*
		e	80	80	80	80	80		
4	Toilet facility	0	348	49	3	3	4	526.355	0.00*
		e	80	80	80	80	80		
5	Furniture	0	245	52	38	62	3	450.325	*00.0
		e	80	80	80	80	80		
6	School building	0	307	76	12	5	2	601.94	*00.0
		e	80	80	80	80	80		
7	Class rooms facility	O	256	79	28	34	2	524.82	0.00*
		e	80	80	80	80	80		
8	Furnishes of classrooms	0	283	90	17	8	2	706.825	0.00*
		e	80	80	80	80	80		
9	Play ground facility	0	162	116	74	33	15	181.125	0.00*
		e	80	80	80	80	80		
10	Separate staff room	О	128	42	67	85	78	49.325	0.00*
	_	e	80	80	80	80	80		

o=Observed frequency

e=Expected frequency

\*P≤ 0.05

The participant of the study were also significantly in favor of all areas selected regarding quality of content (curriculum) as an indicator of quality education with different strength of chi square value for all 10 indicators (Curriculum is according to the learner's and society needs materials are adequate, comprehensiveness, manageable, suffi-

ciency of books, supplementary materials, course content relationship, cultural needs and revision of curriculum). Obtained frequency is significant in the favor of the indicators as compare to the expected frequency (80) at 0.5 level of significance (see table 3).

1	Curriculum is according to the	0	153	122	72	33	20	162.07	0.00*
	learner's needs.	e	80	80	80	80	80		
2	Existing curriculum match s	O	142	126	76	43	13	147.99	0.00*
	society needs.	e	80	80	80	80	80		
3	Teaching material is adequate	О	138	104	103	45	10	132.42	0.00*
	and attractive.	e	80	80	80	80	80		
4	Curriculum is comprehensive	О	122	23	95	46	14	116.87	0.00*
	and interesting.	e	80	80	80	80	80		
5	Curriculum is well managed.	0	132	95	106	48	19	104.37	0.00*
		e	80	80	80	80	80		
6	Sufficient books are available in	O	129	75	65	74	57	40.20	0.00*
	the library.	e	80	80	80	80	80		
7	Supplementary materials with	0	129	77	63	68	63	39.15	0.00*
	text books are available.	e	80	80	80	80	80		
8	Course content is according to	O	149	105	81	39	26	124.80	0.00*
	learners' mental level.	e	80	80	80	80	80		
9	Curriculum reflects cultural	O	157	112	92	31	8	183.52	0.00*
	values.	e	80	80	80	80	80		
10	Course content is regularly	O	212	90	67	20	11	325.67	0.00*
	revised and refined.	e	80	80	80	80	80		

It was noteworthy that the participants were significantly in favor of all the areas selected regarding the quality of process (methodology) as an indicator of quality education with different strength of chi square values for all 10 indicators (method usage, a.v.aids, professionalism, lesson plan prepa-

ration, refresher courses, command over subject, in-service training, students questioning mother tongue usage). Obtained frequency is significantly in the favor of the indicators as compare to the expected frequency (80) at 0.5 level of significance (see table 4).

Table 4: Quality of process

S.N	statements	f	SA	A	UD	DA	SDA	$X^2$	P
1	Activity based method is used in the classes.	О	150	123	73	45	9	163.3	0.00*
	in the classes.	e	80	80	80	80	80		
2	A.V.aids are available in the	0	197	122	55	21	5	314.8	0.00*
	school.	e	80	80	80	80	80		
3	Teachers are well trained to use	0	176	86	105	27	6	227.25	0.00
	A.V aids.	e	80	80	80	80	80		
4	Teachers are professionally	0	270	97	30	2	1	640.175	0.00*
	equipped	e	80	80	80	80	80		
5	Teachers prepare lesson plan	0	154	109	105	27	5	192.2	0.00*
	regularly.	e	80	80	80	80	80		
6	Refresher courses improve	0	288	85	25	1	1	734.95	0.00*
	teaching skills.	e	80	80	80	80	80		
7	Teacher has command over	0	288	94	16	2	2	520.4	0.00*
	subject matter.	e	80	80	80	80	80		
8	In-service training is provided	0	270	92	31	6	1	629.525	0.00*
	to the teachers.	e	80	80	80	80	80		
9	Questioning is in the class is	O	107	84	102	73	34	42.425	0.00*
	encouraged.	e	80	80	80	80	80		
10	Mother tongue as a medium of	O	235	93	56	11	5	439.45	0.00*
	instruction is useful.	e	80	80	80	80	80		

It was also inferred that the respondents were not significantly in favor of all the areas selected regarding the quality of outcomes as an indicator (annual evaluation system, usage of assessment, regularity in assessing procedure, monthly written tests, transparency of evaluation system, verbal assessment system, improving written skills,

achievements from assessment, habit of daily classroom assessment, promotion of good habits) of quality education with different strength of chi square values for example about the transparency of evaluator/assessment system used in the schools (see table 5).

Table 5: Quality of Outcomes

S.N	Statement	f	SA	A	UD	DA	SDA	$X^2$	P
1	Annual evaluation system is used	0	326	70	3	12	1	711.86	0.00*
	at primary level.	e	80	80	80	80	80		
2	Assessment procedures to enhance	0	312	83	4	10	1	642.5	0.00*
	student's learning.	e	80	80	80	80	80		
3	Teachers regularly assess perfor-	0	276	98	22	3	1	678.25	0.00*
	mance.	e	80	80	80	80	80		
4	Monthly written tests judge the	0	273	93	27	6	1	649.3	0.00*
	knowledge and skills	e	80	80	80	80	80		
5	Annual evaluation system is trans-	0	112	69	148	34	37	121.67	0.00*
	parent.	e	80	80	80	80	80		
6	Verbal assessment is used to in-	0	272	98	27	2	4	654.025	0.00*
	crease students reading skills.	e	80	80	80	80	80		
7	Assessment is used to improve	0	260	113	25	20	2	409.98	0.00*
	writing skills of the students.	e	80	80	80	80	80		
8	Evaluations are used to measure	О	237	99	23	2	3	660.9	0.00*
	the achievement of students	e	80	80	80	80	80		
		e	80	80	80	80	80		
10	Assessment system promotes the	O	198	126	59	13	4	334.325	0.00*
	habit of study and discourages the								
	habits of selective study.								

N	Quality indicators	Schools	f	SA	A	UD	DS	SDA	$X^2$	P
1	Quality of Learning	Boys	0	1256	415	160	120	46	18.210	.63
	Environments		e	1406	393.2	106.5	79.5	15		
		Girls	О	1475	351	78	86	10		
			e	1246.2	579.8	78	86	10		
2	Quality of Contents	Boys	О	761	571	390	195	83	50.814	.04*
			e	731.5	514.5	410	223.5	120.5		
		Girls	О	657	547	426	255	115		
			e	657	514	426	257.5	145.5		
3	Quality of process	Boys	O	1036	564	264	103	33	23.037	0.34
			e	1069	492	298.5	107.5	33.5		
		Girls	O	1050	445	336	123	46		
			e	1081.5	506	268.5	106	38		
4	Quality of Outcomes	Boys	O	1212	574	210	37	24	41.681	*00.
	•	•	e	482	482	192.5	36	28.5		
		Girls	О	1261	482	192.5	39	25.5		
			e	1338	390	175	41	56		

Table6: Comparison of Male and Female Teachers' Perceptions regarding the Status of selected Quality Indicators

## **Conclusions and Implications**

From the results of the study it may be concluded that separate staffrooms were not available for teachers in the primary schools so, it is recommended to make arrangements of separate staffrooms for the teachers so, that they can take some rest in free/leisure times. Moreover, sufficient books for readers and supplementary materials for teachers were not available in the schools, so, it is recommended to establish libraries in the schools for the purpose.

Questioning by the students in the classrooms were not encouraged by teachers. In this regard, supervising authorities should give special attention by holding refresher courses in this context. Furthermore, in the schools annual evaluation and assessment system was used to improve reading and writing skills of the learners but the transparency and impartialness of the examination/evaluation system was not as transparent and impartial as should be. The exam conducting bodies should be appointed on merit basis. Papers setting and marking work should be done by expert teachers and nomination of supervisory staff on performance basis may be helpful in enhancing the quality of primary education in the province.

Quality of learning environment and quality of process were approximately same in both the boys and girls schools, but quality of content in boys schools is better as cmpare to that of girls schools so, quality of content of female schools need to be improved either by providing separate books or some additional allied materials. Similarly quality of out comes in the boys schools seem good as compare to female schools which need to be improved urgently.

### References

Adams D. (1993). *Defining education quality*. In improving educational quality project Publication # 1. Biennial report. Arlington, V.: Institute for International Research.

Brown, (1998-99). The East Africa Madrasa Programme: The Madrassahs resource centers and their community-based preschool Programme:Geneva.Aga Khan Foundation

Cheng, Y. & Cheung, W. (1997). Multi-model of education quality and multi levels of self management in schools. *Educational Management and Administration*, 25(4), 26-37.

Iqbal, Z. (1996). Teacher training: The Islamic perceptive. Islamabad: Institute of Policy Studies.

Mirza, M. (2003). Quality of primary education in Pakistan a research study, 2003

Memon, M. (2003). The quality of education in Pakistan: A national policies perspective. A paper presented in the conference on The Research and Policy Dialogue on Achieving Quality in Education held in Lahore on March 4-5, 2003.

Santos, M.E. (2007). *Quality education in Argentina*:
Determinants and distribution using PISA test scores. Retrieved June 8, 2010

Thaung, N.N. (2008). *Quality indicator*, A paper presented in the Capacity Building Workshop on Monitoring and Evaluating Progress in Education in the Pacific in Nadi, FIJI on 27–31 October 2008.

UNESCO, (1998).Learning achievement in primary schools of Pakistan. A quest for quality education Islamabad Pakistan

UNICEF, (2000). Defining quality in education. A paper presented at the International Working Group on Education meeting, Florence Italy, June 2000. (Principal researcher: Jeanette Colby).

UNESCO, (2000). World education forum: Dakar framework for action 2000. Paris: UNES