

## Effectiveness of Monitoring Unit in Improving Physical Resources at Primary School Level in Khyber Pakhtunkhawa, Pakistan

Abdul Shahab khan<sup>1</sup> Muhamad Ayaz, Mati ullah<sup>2</sup> Zahid ullah, Waliullah<sup>1</sup>

1. Institute of Education & Research, University of Science & Technology, Bannu

2. Department of Education & Research, Sub-Campus, Lakki Marwat, University of Science & Technology, Bannu

### Abstract

The nature of the study was survey design. Population of the study was consisting of all primary school male and female teachers and all male and female data collection and monitoring assistants in Khyber pakhtunkhawa. The sample was randomly selected from urban and rural schools in which 248 male and 154 female teachers out of 8268 and 5164 respectively from Primary Schools and 24 Male and 24 female data collection and monitoring assistants out of 48 from district Bannu and Lakki Marwat Through Stratified Random Sampling technique. Single questionnaire was developed by using five point likert scales. Data is properly analyzed by using arithmetic mean and standard deviation. The major purpose of the study was to know the effectiveness of monitoring unit in improving physical facilities at Primary School Level. It is conclude from the collected information that monitoring unit play impact role in monitoring the condition of school building, availability of boundary walls, proper provision of electricity, drinking water, toilet facility for teachers and students, and make sure the presence of non-teaching staff. In the light of conclusion it is recommended that existing monitoring unit must concentrate on the provision of quality physical resource. It is also recommended that monitoring unit make sure the availability of A.V aids, setting arrangements, and others teaching facilities for improving educational quality at primary school level in Khyber pakhtunkhawa.

**Keywords:** Independent Monitoring Unit, Primary school, Physical facilities, Effectiveness.

### Introduction

Existing monitoring unit was developed to monitor progress of schools on monthly basis and communicate their report to high authorities'. existing monitoring system collect information about student enrollment, physical resource, student dropout, and teacher's performance and monitoring of school funds. For the purpose of monitoring school 303 male and 172 female monitoring assistants were recruited having smart phone with GPRS for transformation of collected information to district monitoring officer.

Physical facilities of the school play vital role in the educational institution in term of achieving the educational objective and purpose. Such facilities has effective role in improving the quality and quantity of education. There is large number of physical facilities in educational institution according to its level, some major physical facilities which is most important in every educational level like school building, cafeteria and classroom, library, laboratory, common room, electricity, drinking water, A.V aids, transportation, dispensary, furniture, exam hall, playground staffroom, principal room, clerical office (Khan & iqbal, 2012). Educational resources as, all kinds of facilities that facilitate curricular and co-curricular activities. (Ethiopian Ministry of Education, 2002).

(Halstead, 1974) says that Researches identify a deep relationship between student learning and its physical atmosphere. Student sitting arrangements in a hotter place, low lighting and listening difficulty of lecture would not thought as much as he would seek in a average temperature, proper sitting. Our educational institutions buildings build very attractively from outside but they failed inward to provide learning conditions for students.

(Cotton, 1997; Stevenson, 1996) argue that school structure has effective role on student learning and academic achievement. Different Researches has identified the relationship of student achievement and school structure. (Moore, G., 1994) explain that different researchers identify that students in such institutions which situated in noisy polluted areas has significant high level in blood pressure. It is also identify that high noise pollution levels from industry and traffic, etc. caused of disturbance in Concentration, more errors on tasks completions.

(Achilles, 1996) explain that as other physical facilities class size also impact on school performance, (Moore, G., 1994) highlight that the effect of geo graphical location school on physical well-being of students. (Burgess, 1989) identify that classroom design and layout has impact on student behavior. In favor of the statement (Renchler, 2000) also argue that it is also have a relationship with grade configuration and learning outcomes. (Buckley, et all, 2004) explain that School facilities, are those which consists of all types of resources that use for academic and nonacademic purpose, which play major role in teaching, learning process. School facilities help teacher to achieve his/her target as well and help the learner to achieve effectively. Therefore, the school facilities need a proper attention as they have a great role in the help of teachers and students motivation.

(Bakari, J et al, 2014) says that it is revealed that educational institutions with enough physical facilities

had performance over those with less physical resource. Administrators of schools identify that the educational resources are a more beneficial for students' educational development. The findings showed that the conditions of the physical facilities whether new or old had a effective motive on student grade achievement. The design of classroom, sitting space, the sitting positions of the pupils in the context to lighting, windows and chalkboard would have impact on the schools performance. This is strongly indicated that there was great motive of physical Facilities the most schools led to low performance. Because of their management and untrained teachers. (Isaiah,M.N,2013) discovered that deficiencies in school buildings major impact on teacher.

(Suleman,Q & Hussain,I ,2014) identify that there is significant effect of classroom physical environment on the academic scores, Well equipped classroom with physical facilities has a significant and positive impact on the academic achievement scores. It is further argue that when the students feel comfort within classroom, then they will have much focus on the lesson taught to them and that is why they will get more learning opportunity from the teachers and thus they will obtain high grades.

### **Objectives of the Problem**

1. To know the effectiveness of Monitoring Unit on monitoring physical Facilities at primary school level.
2. To make recommendation for monitoring unit to improve the quality of physical facilities at primary school level.

### **Research Hypothesis**

Ho: There is no effect of Monitoring unit on improving educational resources at Primary School Level in Khyber Pakhtunkhawa.

### **Significance of the Study**

In competitive and fast growing era of the world every society has a desire to become more developed and civilized nation of the world. Education has the ability to fulfill this desire. In this context monitoring unit take significant role for the provision of quality education thus

1. The study will helpful to identify the effectiveness of monitoring unit on monitoring of physical facilities.
2. The study will be helpful to identify different aspect of physical facilities which still undefined for monitoring.
3. The study will also helpful for the provision of physical facilities and its effective usage which help in future for the provision of quality education in Khyber pakhtunkhawa.
4. The study will helpful for researcher to conduct research in this regard.

### **Delimitations of the Study**

The following was the delimitation of the study:

1. The study was delimited only to district Bannu and district Lakki Marwat of Khyber Pakhtunkhawa.

### **Limitations of the Study**

The following were the limitations of the study:

Data collection was made through different research instrument. But the present study was limited to single type questionnaire.

## **METHODOLOGY**

### **Design of the Study**

The study was descriptive in nature.

### **Population**

Population is a group of people, event or items have same characteristics. There for the population of the study were all primary school male and female teachers and all male and female data collection assistants in Khyber pakhtunkhawa.

### **Sampling procedure**

Sample is a subset of the population that the Researcher takes for the purpose of making generalizations. Therefore Stratified Random Sampling technique was used.

### **Sample Size**

The sample was equally selected from urban and rural areas schools in which 248 male and 154 female teachers

out of 8268 and 5164 respectively from Primary Schools and 24 Male and 24 female data collection and monitoring assistants out of 48 from district Bannu and Lakki Marwat through Stratified Random Sampling technique. Under John Curry (1984) formula as shown below the sample was selected.

**Sample Size Rule of Thumb**

10-100	100%
101-1000	10%
1001-5000	5%
5001-10000	3%
10000 +	1%

Sample distribution in from of table

Respondent	No	Gender	Bannu		Lakki	
Teachers	396	Male	Urban	Rural	Urban	Rural
			62	62	62	62
		Female	38	38	38	38
Monitoring assistants	48	Male	12		12	
		Female	12		12	

**Data Instrument**

The research was survey thus single questionnaire was used for both data collection assistants and teachers. The researcher developed questionnaire by using five point likert scales.

**Data Collection Procedure**

The researcher was himself collecting the data from teachers and data collection assistants through visiting schools and monitoring office in both districts.

**Data Analysis**

Data analysis was finalized by using arithmetic mean and standard deviation. participants central point of view were made on the basis of higher Mean for that purpose the following formula was used.

SA	1.0 ----- 1.80
A	1.81----- 2.60
UD	2.61 ----- 3.40
DA	3.41 ----- 4.20
SDA	4.21 ----- 5.00

**RESULTS AND DISCUSSION**

**Table 1: Teachers response regarding monitoring of Physical Facilities**

S.No	Parameter	SA	A	UD	DA	SDA	Mean	St.Div
1	School building	174	217	05	00	00	1.57	.52
2	Boundary walls	202	186	01	00	07	1.54	.68
3	Toilet facilities	212	142	01	36	05	1.68	.95
4	Electricity	106	285	00	05	00	1.75	.50
5	Drinking water	146	224	02	10	14	1.79	.86
6	Teaching facilities	16	33	15	164	168	4.09	1.07
7	Enough class rooms	16	31	36	184	129	3.95	1.04
8	Educational A.V Aids	32	48	34	140	151	3.87	1.20
9	Academic calendar	14	18	11	144	209	4.30	.98
10	Non-teaching staff	65	218	16	49	48	2.48	1.24

Table no 1 show that out of total teachers respondents 174 teachers strongly agree, 217 agree, 05 undecided, 00 disagree, 00 strongly disagree while mean value of respondent is 1.57 and standard deviation is .52. Which show that teachers strongly agree that monitoring system monitor condition of school building. Out of total respondents 202 teachers strongly agree, 186 agree, 01undecided, 00 disagree, 07strongly disagree, while mean value of respondent is 1.54 and standard deviation is .68. This indicates that teachers strongly agree about

monitoring system in monitoring boundary walls. Out of total respondents 212 teachers strongly agree, 142 agree, 01 undecided, 36 disagree, 05 strongly disagree while mean value of respondent is 1.68 and standard deviation is .95. Which highlight that teachers strongly agree about monitoring toilet facilities. Out of total respondents 106 teachers strongly agree, 285 agree, 00 undecided, 05 disagree, 00 strongly disagree while mean value of respondent is 1.75 and standard deviation is .50. Which explain that teachers strongly agree that monitoring system collect information about availability of electricity in school. Out of total respondents 146 teachers strongly agree, 224 agree, 02 undecided, 10 disagree, 14 strongly disagree while mean value of respondent is 1.79 and standard deviation is .86. Which show that teachers strongly agree that existing monitoring system monitor drinking water. Out of total respondents 16 teachers strongly agree, 33 agree, 15 undecided, 164 disagree, 168 strongly disagree while mean value of respondent is 4.09 and standard deviation is 1.07. This indicates that teachers disagree about the statement that monitoring system monitor teaching facilities. Out of total respondents 16 teachers strongly agree, 31 agree, 36 undecided, 184 disagree, 129 strongly disagree while mean value of respondent is 3.95 and standard deviation is 1.04. Which show that teachers disagree with statement that monitoring unit monitor availability of classrooms. Out of total respondents 32 teachers strongly agree, 48 agree, 34 undecided, 140 disagree, 151 strongly disagree while mean value of respondent is 3.87 and standard deviation is 1.20. This show that teachers disagree that monitoring system monitor A.V aids. Out of total respondents 14 teachers strongly agree, 18 agree, 11 undecided, 144 disagree, 209 strongly disagree while mean value of respondent is 4.30 and standard deviation is .98. Which show that teachers strongly disagree with the statement that monitoring system monitor academic calendar. Out of total respondents 65 teachers strongly agree, 218 agree, 16 undecided, 49 disagree, 48 strongly disagree while mean value of respondent is 2.48 and standard deviation is 1.24. Which identify that teachers agree with the statement that monitoring system monitor regularity of Non teaching staff.

**Table 2: Data collection & Monitoring assistants' response regarding monitoring of Physical Facilities.**

<i>S.No</i>	<i>Parameter</i>	<i>SA</i>	<i>A</i>	<i>UD</i>	<i>DA</i>	<i>SDA</i>	<i>Mean</i>	<i>St.Div</i>
1	School building	17	27	00	01	03	1.87	1.00
2	Boundary walls	20	27	00	01	00	1.62	.60
3	Toilet facilities	20	27	00	01	00	1.62	.60
4	Electricity	24	24	00	00	00	1.50	.50
5	Drinking water	46	02	00	00	00	2.08	.40
6	Teaching facilities	00	02	00	08	38	4.70	.68
7	Enough class rooms	00	00	01	23	24	4.47	.54
8	Educational A.V Aids	00	02	04	15	27	4.39	.81
9	Academic calendar	00	00	04	30	14	4.20	.58
10	Non-teaching staff	48	00	00	00	00	1.00	.00

Table no 2 show that out of total respondents 17 monitoring assistants strongly agree, 27 agree, 00 undecided, 01 disagree, 03 strongly disagree while mean value of respondent is 1.87 and standard deviation is 1.00. Which show that monitoring assistants agree that monitoring system monitor condition of school building. Out of total respondents 20 monitoring assistants strongly agree, 27 agree, 00 undecided, 01 disagree, 00 strongly disagree, while mean value of respondent is 1.62 and standard deviation is .60. This indicates that monitoring assistants strongly agree about monitoring system in monitoring boundary walls. Out of total respondents 20 monitoring assistants strongly agree, 27 agree, 00 undecided, 01 disagree, 00 strongly disagree while mean value of respondent is 1.62 and standard deviation is .60. Which highlight that monitoring assistants strongly agree about monitoring toilet facilities. Out of total respondents 24 monitoring assistants strongly agree, 24 agree, 00 undecided, 00 disagree, 00 strongly disagree while mean value of respondent is 1.50 and standard deviation is .50. Which explain that monitoring assistants strongly agree that monitoring system collect information about availability of electricity in schools. Out of total respondents 46 monitoring assistants strongly agree, 02 agree, 00 undecided, 00 disagree, 00 strongly disagree while mean value of respondents is 2.08 and standard deviation is .40. Which show that monitoring assistants agree that existing monitoring system monitor drinking water. Out of total respondents 00 monitoring assistants strongly agree, 02 agree, 00 undecided, 08 disagree, 38 strongly disagree while mean value of respondent is 4.70 and standard deviation is .68. This indicates that monitoring assistants strongly disagree about the statement that monitoring system monitor teaching facilities. Out of total respondents 00 monitoring assistants strongly agree, 00 agree, 01 undecided, 23 disagree, 24 strongly disagree while mean value of respondent is 4.47 and standard deviation is .54. Which show that monitoring assistants strongly agree with statement that monitoring unit monitor availability of enough class

rooms. Out of total respondents 00 monitoring assistants strongly agree, 02 agree, 04 undecided, 30 disagree, 14 strongly disagree while mean value of respondent is 4.20 and standard deviation is.58. This show that monitoring assistants disagree that monitoring system monitor A.V aids. Out of total respondents 48 monitoring assistants strongly agree, 00 agree, 00 undecided, 00 disagree, 00 strongly disagree while mean value of respondent is 1.00 and standard deviation is 1.00. Which show that monitoring assistants strongly agree about monitoring of Non teaching staff in schools.

### CONCLUSION

After proper collection and analysis of the data most of the participants views that monitoring unit monitor school condition and it's major and minor constructions. and make sure the availability of boundary walls for school protection and make sure the proper availability of electricity, drinking water, toilet facility for teachers and students, it is also identify the existing monitoring system greatly focus on the regularity of non-teaching staff. But in some aspects Majority of the participants has of the view that monitoring unit did not sure the proper availability of A.V aids and other teaching facilities like library, books, setting arrangement, academic calendars etc in the school. Majority of the respondent argue that overcrowded class room is most serious issue at primary school level in this regard existing monitoring unit did not stress for the provision of class rooms at primary school level.

### RECOMMENDATIONS

On the bases of results it is conclude that existing monitoring unit play effective role in monitoring school building as well as monitor major and minor repair so it is recommended that monitoring unit must encourage. It is also mentioned in the results that independent monitoring unit monitor proper availability of electricity, drinking water, toilet facility for teachers and students and make sure the regularity of non teaching staff, so it is recommended that monitoring assistants should motivate for monitoring and make sure the availability of up to date physical facilities for teachers and students. It is recommended on the ground of conclusion that independent monitoring unit has established proper mechanism for monitoring A.V aids, sitting arrangements, teaching facilities, enough and overcrowded classrooms, provision of text book etc.

### REFERENCES

- Achilles, C.M. (1996). Students achieve more in smaller classes. *Educational Leadership*, 53(5), 76-77.
- Bakari,J.Likoko,S.Ndinyo,F (2014) Effects of Physical Facilities on Performance in Kenya Certificate of Secondary Examination in Public Schools in Bungoma South, Kenya. *International Journal of Science and Research ISSN (Online): 2319-7064 Volume 3 Issue 8, August 2014 p 348*
- Buckley, J., Schneider, M., and Shang, y. (2004). Effects of school facility, quality on teacher retention in urban school district. National clearing house for educational facilities. Washington Dc
- Burgess, J.W. & Fordyce, W.K. (1989). Effects of preschool environments on nonverbal social behavior: Toddlers' interpersonal distances to teachers and classmates change with environmental density, classroom design, and parent-child interactions. *The Journal of Child Psychology and Psychiatry and Allied Disciplines*, 30(2), 261-276
- Cotton, K. (1997) School size, school climate, and student performance. Northwest Regional Educational Laboratory.(online) Available: <http://www.nwrel.org/scpd/sirs/10/c020.html>
- Ethiopian Ministry of Education (2002). The Education and training policy and its implementation.MOE: Addis Ababa.
- Halstead, D. (1974). Statewide planning in higher education. Washington: U.S Government printing Office.
- Khan, P & Iqbal. (2012). Interdisciplinary. *Journal of contemporary research in business*, vol. 4 no.3, p.211.
- Moore, G.T. & Lackney, J. A. (1994). Educational facilities for the twenty-first century: Research analysis' and design patterns. Report R94-1, School of Architecture and Urban Planning, University of Wisconsin-Milwaukee: Center for Architecture and Urban Planning Research. (Available on Eric EA026223).
- Renchler, R. (2000). Grade Span. *Eric Research Roundup*. [On Line]. Available: <http://eric.uoregon.edu/publications/roundup/S00.html>.
- Stevenson, K. R. (1996). Elementary school student capacity: What size is the right size? *CEFPI's Educational Facility Planner*, 33(4), 10-14.
- Suleman,Q & Hussain,I (2013) Effects of Classroom Physical Environment on the Academic Achievement Scores of Secondary School Students in Kohat Division, Pakistan *International Journal of Learning & Development ISSN 2164-4063 2014, Vol. 4, No. 1*