

Parameters for Textbook: Improving Quality of Primary Education

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Abstract

This research explores the parameters of quality textbook and the current status of 5th class textbooks. Textbook counts due to its importance in attaining required goals of quality education. Quality textbooks have the capacity to improve the required skills of learners and consequently support the improvement of quality education as quality education is mostly connected to students' outcomes. A survey was conducted wherein officers of the Textbook Board Khyber Pakhtunkhwa participated and head teachers and teachers from public primary schools also took part. An interview was conducted for the Textbook Board officers to find out the parameters of quality textbook that improve the outcomes of the students. In this regard a questionnaire administered for head teachers and teachers to investigate the present status of 5th class textbook. 10 officers of Textbook Board, 281 primary school teachers and 256 head teachers were taken as sample from six districts of Khyber Pakhtunkhwa.

Key Words:

Quality,
Quality
Education,
Quality
Textbook,
Parameters

Introduction

Textbook is a medium of instruction frequently exercised in institutes for achieving knowledge. It conveys trustworthy material significantly delivered to the class of students suggested through the set of courses. It categorizes and organizes themes in a way that students should learn them. Textbook pursues to point out how lessons can be schemed with proper exercises and activities.

Textbooks have important role in the improvement of quality education. Textbook stands for giving knowledge about the specific subject. Learners depend on it because textbook is developed to communicate particular vocabulary and exercise for learners. Educators seek aid from it to provide the necessary curricula as according to Rezat (2010), educator participates fundamental part in facilitating textbook usage. It is utilized for gaining essential learning required to learners.

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It contains knowledge as well as events mandatory to achieve desirable academic achievements (Khutorskoi, 2006). Textbook should not merely concern to the related knowledge although according to Lemmer, Edwards and Rapule (2008) it includes the basic information in proper deepness as well as technical correctness. Textbook conveys proper knowledge and skills which improve the learners' abilities.

Purposes of the Research

Purposes of the research were:

- 1) To identify parameters of textbooks that improves the education quality at primary level.
- 2) To assess textbooks' quality.

Research Questions

- 1) What are those parameters of quality textbook that improve the quality of primary education?
- 2) To what extent the existing textbooks fulfil the quality parameters?

Literature Review

Quality and Quality Education

The concept of quality is dynamic as it varies person to person. Sallis (2005) discussing it that the concept of quality of one person is often disputes with another and no two professionals ever agree to the same conclusion. Several investigators defined it in dissimilar senses. According to Crosby (1979) quality is conformity to demand as well as Nkang (2013) denotes it the amount of excellence in an item. It refers to those standards needed in product that fulfill individuals' requirements. Ampiah (2008) described to enhanced learners' achievement is one of the objectives of education quality.

Generally education quality indicates towards pupils' outcomes concerning capabilities and enactment in society. Tikly and Barrett (2009) defined quality education "as one that develops whatever capabilities society and individuals have reason to value" (p. 19). Students and educators learn those values from textbooks which enables learners to be competent in skills and information prevailing in society. Quality textbook which improve the quality of education provide informational basis to the learners as "a key conclusion is the need to develop the informational basis on which education quality is conceived" (Tikly & Barrett, 2009, p.19). Thus education quality is concerned to the quality of textbook.

Textbooks Role

When highly organized texts are available in the form of textbook with a mix of quality teachers and motivated learners then effective learning emerges. Textbooks are used in classroom to make an arrangement for the chain of instruction and study.

Instructors pursue thoroughly the texts, especially in reading, science and mathematics. Textbook represents the set of courses as well as established main concern for educators inside the class (Khalick, Waters & Le, 2008). Instructors follow the textbook with the concerns of teaching learning process. Slisko (2010, p. 6) described textbook as it “plays an important role in science teaching and learning, scientific accuracy and cognitive adequacy of their contents were explored and analyzed much less frequently than alternative conceptions of students and teachers”. Textbooks’ developments caused by the contents’ cognitive adequacy and technical correctness and happen to be beneficial for their stakeholders as “they are a valuable resource for many teachers” (Dole & Shield, 2008, p. 23). It is the rich mean of learning for educators along with learners too.

Textbooks are precious treasures on which educators and learners trust with sureness, also think textbook a basis for delivering a great deal of knowledge and skill. Lemmer, Edwards and Rapule (2008) mentioned that “Textbooks are expected to provide a framework for what is taught, how it may be taught and in what sequence it can be taught” (p. 175). Several textbooks explain lessons with support of pictures which is useful in understating the lesson and according to Niaz and Maza, (2011) various textbooks impart more detailed diagrams. Teachers and young students are attracted by these pictures and diagrams to understand the lesson thoroughly.

Motivation for Learner

Motivated learner is the essential component of effective learning of any subject in the quality education mix. Textbooks have their own share to motivate and attract young learners. Beck and McKeown (2001, p. 225) elaborated as “what motivated us to design the approach, which was based on a series of studies conducted in the 1980s that provided a revealing look at how young readers interact with the ideas in their textbooks”. Learners have interest to review what they study in a textbook. According to She (1995) first and third grade textbooks comprised on multiple images and photos of animal, child, plant, flower, and fish. These motivate young learners to gain knowledge of science effectively. Several textbooks contain the solution of tough assignments which attract learners. Boostrom (2010) mentioned that students who have a problem and believe that a particular textbook comprises the solution will be motivated. Consequently learners will have the solution of complicated tasks.

Certain features of textbook absorb learners. According to Boostrom (2010) personal pronouns, dramatic verbs, character identification, novelty, fast action and concrete detail are text features that improve student motivation and memory. Similarly learners express attraction in comprehensive and brief text.

Quality textbook not merely invite the interest of young learners but also are effortless to study, have the solution of complicated exercise, besides it develops the ideas of the learners.

Impart Knowledge

The great mean of knowledge for every person specifically for learners along with educators are textbooks. Textbooks impart all required information needed to be taught in institutions. “Textbooks, in particular, serve as the primary carriers of school knowledge” (Chen, 2006, p.40). A quality textbook transfers essential knowledge effortlessly that easy for students to understand well. Durwin and Sherman (2010, p. 32) described as “A great textbook provides the essential information in a way that students can truly understand without much background knowledge”. It updated learners using the plentiful practice as well as converts the skills of literacy. Accordingly book is the substance depiction of the emotions and passions communicated by those individual who give attention sincerely regarding in what way literacy can convert as well as improve individual practice (Reinking, 2008). Textbook is the fountainhead for leading individual coupled with notified objective. “Ultimately, whether we like to admit it or not, the instructor, in turn, relies on the textbook and its author for such guidance and direction” (Swetz, 2007, p. 166).

Textbook supports educators and learners by taking illustrations using graphs pictures and diagrams. Accordingly the purposes of treating skillful demonstrations are to support students through displaying illustrations with the structure of manuscript in the shape of graph planned with the help of professionals in the area of subject (Chang, Sung & Chen, 2010). Learners require expertise in different subjects as Swetz (2007) point out that first they must achieve several mathematical maturity as well as experiences to well comprehend the concepts to develop. Textbook is the source of reliable facts in different studies which improve their understanding in related field of subjects.

Lead Learner Knowledge

Textbooks lead learners as well as educators how to learn about information prevailing in society. Learners acquire knowledge about the universe and society for the better survival from textbook. According to Knain (2010) learners acquire something about the function of proficiency in society, their concern to this

proficiency and about the science and technology. Textbooks influence the pupils learning by examples and graphs.

Students acquire knowledge with the help of textbooks which improve students' talents as well as they acquire whatever textbook is containing. Law (2008, p. 569) mentioned as "At the beginning of each lesson, students share their ideas about the text that they are going to read and any reading materials related to the text that they have collected at home". Textbook conveys educational purposes. The purpose of studying textbook means to convey the information to the learner by means of segment of the understanding procedure as well as make recognized the aims of education (Arik & Kezer, 2010). Textbook leads learners towards the directed national curriculum to accomplish the aim of education.

Value Learning

Textbook is the mean through which educational value is communicated to attain the objectives of national curriculum. Within its finest enactment value education imparts the norms of culture and society. Educational value offers education quality to learners in several fields of studies. "Science education necessarily contains values because nature does not automatically provide what is to be taught and for what purposes" (Knain, 2010, p. 320). However textbooks support learners to attain knowledge with expert view.

It is not merely depending upon picture but Sutherland (2008, p. 176) described that "numerous books offer techniques for supporting reading comprehension and building vocabulary". Textbook assists learners through delivering the knowledge concerning the importance of culture as Cho and Park (2014) have their opinion about it as it is powerful instruments which facilitate learners identify as well as make learner concept about the society. The social order displays the uniqueness that learners acquire from it. Textbook offers material concerning the values of individual and provides facts on uniqueness. Textbook facilitates learners that how to be tolerant and have positive reaction to the values of others as "textbooks have essential values for education systems in all over the world" (Arik & Kezer, 2010, p. 1400). All these aims are imparting set of information along with informing learners attain practices of day to day life.

Analysis of Textbook Quality

Textbook analysis procedure evaluates the facts concerning the characteristics of textbook clearly identified principles and characteristics which are suitable for imparting knowledge as well as support learners to understand the required achievements. "Textbook analysis is a means by which these features can be

identified and hence the effectiveness of textbooks be established” (Okeeffe, 2013, p. 1). These identified features structured the principles for textbooks quality. Textbook needs analysis to know its quality. The aim of textbook analysis is to shed light on the effectiveness and usefulness of textbooks before they are exercised in classroom to verify that whether it suitable to support the educator and learner.

Content Assessment

The textbook contents are set in an appropriate manner and planned for use in institute curricula. It includes the study areas recognized through the set of courses as well as deal the matter in what way the content should be included. “Better organization of the content and methods in the textbooks assure better information of basic principles and fundamental relations” (Mahmood, 2006, p. 4). Contents of textbook can nourish additional knowledge providing to students instead of simply the matter of subject area. The content of textbook inspires learners’ academic outcomes.

Characteristics of quality Textbook are mentioned by American Textbook Council (2000) in the following:

Information fed is correct, clear and unbiased, national identity should be represented by content, national character should be stressed, improve thoughts in a logical way, attractive format help educators in teaching, evaluate testing, engross learners in instructional activities, engage students in formal and informal assessment.

Quality Textbook and Quality Outcomes

The relationship of textbook and quality outcomes is significant as teachers and students seek help from textbook. Teachers and students rely on textbook and the learner attains the intended outcomes. The source of intended quality outcomes is a quality textbook. UNESCO and UNICEF (2007) elaborated these outcomes are “essential life skills that equip children to face life challenges, make well-balanced decisions and develop a healthy lifestyle, good social relationships, critical thinking and the capacity for non-violent conflict resolution” (p. 34). Consequently, a useful textbook is that which empower learners to attain the desired learning outcomes (Bernier, 1996).

Tam (2014, p 167) described that “There is no doubt that learning outcomes as measures of learning effectiveness and instructional quality can make an important contribution to the improvement of that quality by way of better curriculum and student learning”. These learning outcomes influence the life of individual as UNESCO (2005) vividly elaborated that “The quality and

availability of learning materials strongly affect what teachers can do” (p.17). Thus it is crucial for policy makers to ensure the quality of textbook for learners.

Methodology

Research Design

The design of this study was descriptive survey included qualitative and quantitative data. Ary, Jacobs, Razavieh, and Sorensen(2010, p. 28) described that “Survey research is also called descriptive research uses instruments such as questionnaires and interviews to gather information from groups of individuals”. Qualitative data for Textbook Board officers which included interviews were administered and quantitative data comprises a questionnaire which was structured for head teacher and teacher.

Population and Sample of the Study

Population of this study includes of 10 (100 %) officials of Textbook Board Khyber Pakhtunkhwa and teachers, heads of public male primary schools comprise of six districts. This study used the multiple stage sampling technique. In the first stage 6 districts out of 25 districts of Khyber Pakhtunkhwa, Pakistan were selected. In the second stage head teacher and teachers were randomly chosen from every stratum. The sample of the study was 351 (9% of the population) and 370 (3.5 % of the population). The sampling was chosen according to the Krejcie and Morgan (1970) table of sampling size. The turnout of the responses of head teachers was 256 (72.93%) and teachers was 281 (75.94%).

Statistical Analysis

The qualitative answers of interviews were analyzed in frequency and percentage. The data was analyzed though SPSS 20.0 software. The results of questionnaire were analyzed on frequency percentage and t test. The questionnaire responses of the study were obtained through likert scale of five points from strongly agreed (SA) to strongly disagreed (SDA)

Results and Discussion

Qualitative Analysis and Discussion

The qualitative answers of interviews from 10 officers of Textbook Board were collectively analyzed in frequency and percentage as proposed by Miles and

Huberman (1994). Merely the related statements of the interviewees were mentioned in this study.

Q.1 What do you think the parameters of quality textbook may be?

Table 1. Quality Textbook Parameters

S. No	Items Theme	Frequency	Ratio
1	Improvement of critical thoughts	09 / 10	90%
2	Concentration upon abilities growth	09 / 10	90%
3	Standard content	09 / 10	90%
4	Proper printing	09 / 10	90%
5	Matched by national curriculum	09 / 10	90%
6	Fascinating photographs	09 / 10	90%
7	Motivate learner to learn	09 / 10	90%
8	Comprise on accurate information	09 / 10	90%
9	Improve ideas	09 / 10	90%
10	Involve learners	09 / 10	90%
11	Symbolize national identity	09 / 10	90%
12	Enhanced teaching methodology	07 / 10	70%
13	Guide for desired knowledge and learning	07 / 10	70%
14	Effective learning methodology	06 / 10	60%
15	Communicating content	06 / 10	60%
16	Communicating content	06 / 10	60%

Table 1 indicates 90% of the respondents delivered that textbook quality includes these parameters “improvement of critical thoughts, concentration upon ability growth, contents standard, matched by national curriculum, proper printing, , fascinating picture, inspire learner to acquire, improve ideas, comprise on correct information, involve learner, symbolize national identity. 70% interviewees answered it “enhanced teaching methodology, guide for desired knowledge and learning”. 60% of the respondents aided “methodology for effective learning, communicating content, support value education.

Q.2 What is your opinion the current 5th class textbooks achieve the quality textbooks parameter?

Table 2. Class 5th Textbooks Achieve THE Quality Textbook Parameter

S. No	Items	Frequency	Ratio
1	comprise of national identity	09 / 10	90%
2	improve ideas	09 / 10	90%
3	in line with curriculum	09 / 10	90%
4	achieve to some extent	05 / 10	50%
5	always room for development	05 / 10	50%

Table 2 shows 90% respondents replied textbook of the 5th class achieve fundamental parameters which are “contain national identity, improve ideas of the students and textbooks are matching to the national curriculum”. 70% interviewee aided “yes it achieves basic parameters” although 50% replied it achieves fundamental parameter “to some extent” but there is always “a room for improvement”.

Q.3 What is your view the content of present 5th class textbooks symbolize national identity as well as deliver correct information?

Table 3. Class 5th Textbooks Signify National Identity and Deliver Accurate Information

S. No	Items	Frequency	Ratio
1	signify national identity	09 / 10	90%
2	pictures expose the society	09 / 10	90%
3	deliver correct information	07 / 10	70%
4	symbolize national character	07 / 10	70%

Table 3 reveals 90% respondents replied that the textbook of 5th class signify “national identity, pictures expose society”. 70% of the interviewees supported that textbook “deliver accurate information” and “national character”.

Analysis of Comparative Data of Heads and Teacher

Table 4.

Item	Statements	Group	SA	A	Un	DA	SDA	Mean	SD	t-value	P-value
1	Textbook inspires pupil for learning.	H.T	68	116	00	72	00	3.70	1.143	1.720	0.086
		T	38	153	27	48	15	3.53	1.088		
2	Textbook comprises the Contents for required outcomes.	H.T	52	177	27	00	00	4.09	0.547	0.732	0.464
		T	101	136	00	44	00	4.04	0.993		
3	Textbook content are matching to the pupils' Level	H.T	94	95	14	53	00	3.89	1.115	0.834	0.404
		T	64	160	00	57	00	3.82	1.005		
4	Textbook improves Learners' Thinking.	H.T	63	193	00	00	00	4.24	0.431	2.938	0.003
		T	87	154	13	27	00	4.07	0.858		
5	Textbook impart latest and correct Information	H.T	123	133	00	00	00	4.48	0.500	17.306	0.000
		T	19	134	34	94	00	3.27	1.004		

6	Textbook delivers direction and guidance for teachers.	H.T	46	161	22	16	11	3.83	0.938	4.865	0.000
		T	100	154	10	17	00	4.19	0.771		
7	Textbook improves learners' concepts in different subjects	H.T	49	185	00	22	00	4.01	0.732	0.471	0.638
		T	81	148	19	23	00	3.98	0.910		

Head Teacher= 256 Teachers =281

Df= 535

1. Table 4 statement No.1 reveals the p value is 0.08 which is larger than 0.05, thus, there is no significant difference between the view of these two sample of head teachers and teachers. Head teachers (M= 3.70, SD= 1.143) and teachers (M= 3.53, SD= 1.088) have agreement that textbook inspires pupil for learning. This difference is not significant (t= 1.720, p>0.05) at 0.05 levels of significance.
2. Table 4 statement 2 shows p value is 0.464 that is larger than 0.05, hence, there is no significant difference between the view of these two sample of head teachers and teachers. Head teachers (M= 4.09, SD= 0.547) and teachers (M= 4.04, SD= 0.993) have agreement that textbook comprises the content for required outcomes. This difference is not significant (t= 0.993, p>0.05) at 0.05 levels of significance.
3. Table 4 statement No.3 shows p value is 0.404 that is larger than 0.05, consequently, there is no significant difference between the judgment of these two sample of head teachers and teachers. Head teachers (M= 3.89, SD=1.115) and teachers (M= 3.82, SD= 1.005) have agreement that textbook content are matching to the pupils' level. This difference is not significant (t= 0.834, p>0.05) at 0.05 levels of significance.
4. Table 4 statement No.4 point out p value is 0.003 that is a lesser than 0.05, hence, there is significant difference between the view of teachers and head teachers. The mean score of teachers (M= 4.07, SD= 0.858) and Head teachers (M= 4.24, SD=0.431) and it is concluded that this difference is in favour of head teachers having strong perception as compared to teacher that textbook improves learners' thinking . This difference is significant (t= 2.938, p<0.05) at 0.05 levels of significance.
5. Table 4 statement No.5 indicates p value is 0.00 that is lesser than 0.05, thus, there is significant difference between the view of teachers and head teachers. The mean score of head teachers (M= 4.48 , SD= 0.500) and teachers (M=3.27 , SD= 1.004) and it is concluded that this difference is in favour of head teachers having strong perception as compared to teacher that textbook impart latest and correct information. This difference is significant (t= 17.306, p<0.05) at 0.05 levels of significance.

6. Table 4 statement No.6 displays p value is 0.00 that is lesser than 0.05, hence, there is significant difference between the judgment of teachers and head teachers. The mean score of head teachers (M= 3.83, SD= 0.938) and teachers (M=4.19, SD= 0.771) and it is concluded that this difference is in favour of teachers having strong perception as compared to head teacher that textbook delivers direction and guidance for teachers. This difference is significant ($t= 4.865$, $p<0.05$) at 0.05 levels of significance.
7. Table 4 statement No.7 discloses p value is 0.638 that is larger than 0.05, consequently, there is no significant difference between the views of these two sample of head teachers and teachers. Head teachers (M= 4.01, SD= 0.732) and teachers (M= 3.98, SD= 0.910) have agreement that textbook improve learners concepts in different subjects. There no significant difference ($t= 0.471$, $p>0.05$) at 0.05 significance levels.

Conclusions

Textbook quality has a key role in education quality. Textbook basically comprises these proposed parameters “improvement of critical thinking and ideas, concentration on skills development, standard content, in line by national curriculum, fascinating photograph, motivate learner to learn, comprise on accurate information, involve learner, symbolize national identity, enhanced teaching methodology, guide for desired knowledge and learning and effective learning methodology, communicating content, support value education and free from biasness.

The present 5th class textbook inspires pupil for learning, comprises the content for required outcomes, content are matching to the pupils’ level, touched in depth and topics made uncomplicated, improves learners’ thinking, impart latest and correct information, photographs expose society, delivers direction and guidance for teachers, improve learners concepts in different subjects. But there is constantly opportunity for development.

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