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AN ANALYTICAL STUDY OF EXERCISES IN ENGLISH TEXTBOOK DESIGNED BY PCTB THROUGH REVISED BLOOM'S TAXONOMY

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ABSTRACT
This study is conducted to analyse exercises in the English Textbook using Revised Bloom's Taxonomy (RBT). It aimed to examine the questions at the end of reading texts in an 8th-grade English textbook PCTB designed through the cognitive domain levels of Revised Bloom's taxonomy (2001). The researcher created an evaluative criteria sheet based on the cognitive domain of Revised Bloom's taxonomy (2001) as a framework, and various tables were used as rubrics to classify the cognitive levels of questions at the end of each unit. A coding scheme was developed to categorise the data, which was analysed to identify trends in cognitive levels within the current textbooks. A total of 448 questions from the 8th-grade English textbook by PCTB were analysed. The findings indicated a dominance of Lower Level Cognition in this textbook, with the remembering level being most prevalent at 54.91 percent. There is a significant disparity between the representation of Lower-Level and Higher-Level Cognition. The results are valuable for educators and stakeholders in the educational sector. They can guide decision-making and syllabus design to produce textbooks that better support higher cognitive objectives. This research can also serve as a reference for textbook publishers, editors, teachers, and students. It is recommended that English textbooks incorporate questions that stimulate both low and high-level cognitive skills.

Keywords: Bloom's Taxonomy, Textbooks Evaluation, LLC, HLC

INTRODUCTION

The present study is conducted to analyse exercises of English textbooks produced under the supervision of the Punjab Curriculum and Textbook Board, Lahore (hereafter *PCTB),* which are taught in government schools and many private schools. Textbook evaluation needs some framework, checklist or criteria, so the researcher chose the Cognitive domain of Revised Bloom's Taxonomy of Educational Objectives to analyse the textbook mentioned above. Both Original Bloom's Taxonomy (1956) and Revised Bloom's Taxonomy (2001) have been used by many scholars to analyse ELT textbooks.

No teaching and learning is carried out without a curriculum and syllabus. It is the curriculum which provides the basis of educational development. It brings about positive change among learners (a fundamental component of society). A curriculum must provide a positive change in an individual. Farooq (1994) stated that societal changes should be reflected through the curriculum's organisation and content. The curriculum's objective is to produce responsible and independent individuals by developing their thinking to the highest level of cognition to move from simple to complex cognitive abilities. Among all the educational elements and activities of the Curriculum, the textbooks function as an essential part of the curriculum, a primary instructional tool for language and all other subjects. About the importance of textbooks, Hamza (2004) says that textbook is considered a principal tool for language teaching and learning in Pakistan.

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Next to the textbook, exercises given at the end of every lesson are also considered important aspects for students' thinking and cognitive abilities. So it is essential to consider such textbooks with activities that encourage higher-level thinking skills. Bull (1973) claimed that activities are helpful in enhancing thinking abilities.

Textbook containing messy exercises and inappropriate representation of educational objectives putting less or no emphasis on learning objectives, well-graded educational objectives and teaching material in the hand of learners, the well-planned programme imparted by the ablest teachers, can hinder the attainment of maximum intended outcomes. Bano (2005) opines that a textbook is considered only one legitimate tool in Pakistan. The Knowledge imparted to learners through textbook should be checked through some framework. The textbook should contain exercises that are helpful in the achievement of higher goals.

Textbooks and teaching material must be evaluated to check their consistency and validity. Keshta & Seif (2013) stated that textbook evaluation is necessary in response to the changes in the world, as educational needs are changing rapidly. So there is a need for evaluation processes to evaluate different aspects of the curriculum especially to evaluate textbook to check their negative and positive points and to check whether textbooks are capable enough to impart higher-level cognition.

Murphy (1985) also emphasizes that evaluation of teaching material should be according to present objectives and needs. Mukandan (2006) is of the view that material evaluation should focus on desired learning objectives. Evaluation of ELT textbook should be based on cognitive development and thinking skill to check the ultimate thinking skills for which the textbook is designed.

In this study, Textbook evaluation was performed on English textbook of 8th grade designed by PCTB to determine to what extent the exercises in each textbook emphasize all the six levels of cognitive domain of revised Bloom's taxonomy. To what extent are lower levels (Remembering, Understanding and Applying) and higher levels (Analysing, Evaluating and Creating) of cognitive domain represented in both textbooks. To what extent do the exercises in the English textbook lead students' mental abilities towards levels that demand higher thinking such as (Analysing, Evaluating and Creating) or focus only on lower level thinking such as Remembering, Understanding and Applying, of the cognitive domain? For this purpose, the researcher used cognitive domain of Revised Bloom's Taxonomy (2001) as a framework for this study.

It is made clear in the organizational principles by the author of the handbook I that cognitive domain addresses curriculum development. (Bloom et al 1956: 7) Authors of revised edition of Bloom's taxonomy address authors and publishers of the textbooks as their final audience. They further stated that authors and publishers have potential to influence both students and teachers and incorporate their framework in their textbooks and demonstrate how the taxonomy can be helpful to analyse and align their instructions, objectives and assessment Anderson and Krathwohl (2001 P: xxiii). These statements indicate the usefulness of Bloom's taxonomy for the evaluation of textbook.

Statement of the problem:

It is inevitable that the effectiveness of current English textbooks in fulfilling the needs of English language teaching and students will be determined. The present study evaluated English textbooks' effectiveness by measuring them through the Revised Bloom's Taxonomy.

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Description of the textbooks

Description of competencies and skills in National Curriculum for English Language (NCEL) Grade I-XII 2006

Ministry of Education, Pakistan, stated that such activities are to be introduced at each grade, which provide progressive cognitive development. And the activities which upgrade skills from simple knowledge and comprehension to higher order skills of analysis, synthesis and evaluation to nurture individuals' ability of problem solving, reasoning, critical thinking and creativity. (NCEL Grade I-XII 2006, p. 3).

Chapter-wise description of objectives of PCTB

This book is taught in all the government schools of Punjab, Pakistan. About one million students read this book every year. The purpose of the present study is to evaluate textbooks in the cognitive domain to check to what extent each textbook represents the cognitive level developed by Bloom. Among the competencies and skills focused on in the National Curriculum, the first skill, "Reading and Thinking Skills", is related to the present study. So, in this study, only "Reading and Thinking Skills" is emphasized. The chapter-wise detail of objectives is given below:

Table 1: ***Chapter-wise details of the Objectives of PCTB***

Sr. No.	Title of Chapter	Learning Objectives/ Reading and thinking skills to be achieved
1	Tolerance of the Rasool (SAW)	• Reading for comprehension
2	A Dialogue	• Problem solving(Applying learned rules)
3	On the Ocean (Poem)	• Recognize and use new word(Remember and apply)
4	An Exhibition	• Recognize and use new words • Reading for comprehension
5	Magic Show	• Brainstorming • Reading for comprehension
6	The Twins(Poem)	• Find meaning in the context (Understand and analyse)
7	Clever Mirchu	• Understanding story elements
8	Hockey	• Utilize prior knowledge • Write a dialogue • (Application and creation)
9	Prayer(Poem)	• Reading for comprehension
10	Hazrat Umar (R.A.)	• Conceptual understanding of events • Reading for comprehension
11	A Great Virtue	• Reading for comprehension
12	Water is a Lovely thing (Poem)	• Reading for comprehension implied meaning
13	The telephone	• Choose the correct option (Applying)
14	Let's Make Our Road Safer!	• Read for comprehension

Research Questions

1. What are the differences between the exercises of the English textbook of the Punjab Textbook Board in the light of the cognitive domain of the revised edition of Bloom's Taxonomy?

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a) What is the percentage given to each level of the cognitive domain?
b) What percentage is given to Lower Level Cognitive (LLC) and Higher Level Cognitive (HLC)?

Delimitation

This study is limited to evaluating exercises of English textbooks designed by the Punjab Textbook Board for the 8th grade based on the cognitive domain of Revised Bloom's Taxonomy.

Literature Review

Bloom's Taxonomy is the result of several tests and curriculum designers and instructors (Bloom et al. 1956: 9). They further said that this taxonomy could be helpful for both teachers and curriculum designers to develop the educational objectives of learning in the curriculum. Educators define the classification of those educational objectives for their students.

In addition, it could also support research on examining and the relationship between examination and education. After a comprehensive discussion, it was agreed that such a framework might be obtained by classifying educational goals, as these goals provide a sound base for constructing curricula and tests.

Usefulness of Bloom's Taxonomy

Bloom et al. (1956) proposed the following uses of the taxonomy:

- It provides a classification of the goals of the educational system.
- A support for all those instructors, administrators, specialists, and researchers who deal with curriculum and evaluative issues.
- The taxonomy can be helpful for curriculum designers in specifying educational objectives.

Characteristics of Bloom's Taxonomy

Assaly & Igbaria state some characteristics of Bloom's taxonomy:

1. Educational alignment
2. Clear, obvious, distinctive and logical levels of objectives
3. Psychological orientation
4. Movement from simple to complex educational levels
5. Continuous; each objective leads to the next
6. comprehensive in categorizing behavioural objectives

Cognitive Domain

Those objectives which deal with the recall or recognition of knowledge and the development of intellectual abilities and skills are the core objectives of the cognitive domain. (Bloom et al. 1956: 8)

The cognitive domain of (OBT) was classified into six mental levels in a cumulative hierarchical order, from simple to complex, easy to hard, and the easier level becomes a prerequisite before the higher level of it and so the harder level necessarily involves the simplest level, and, with the indication that the area of mental processes carried out by human memory and memory is the largest area occupied by the base pyramid, and then gradually diminish this area up to reach the top of the pyramid, which represents the highest mental abilities performed by the brain as in Bloom's view. In other words, most of what is done by the brain is just remembering; a simple mental process, and the least they do is complex mental processes such as synthesis and evaluation.

Levels of Bloom's Taxonomy (1956)

The six levels of Bloom's Taxonomy are following:

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1. **Knowledge**

The ability to retrieve particles, faculties, processes, patterns, facts, symbols, names, dates, titles, terms, titles, examples, and all information that requires memorization, recall partial and total information is the first lower most level of Bloom's Taxonomy. Example: To give an example, to know, to mention, and to enumerate.

2. **Comprehension**

The ability to perceive and digest information and ideas is the second level of Bloom's taxonomy, higher than knowledge level. After approaching this level, individual is able to recognize and understand concepts, principles, laws, rules, and general ideas and assimilation and translation into different versions. Example: To understand, to explain, to interpret, to redraft text, to convert from one version to another, to translate.

3. **Application**

It is the ability to apply previously learned abstract ideas and to employ them in real situations new material seen by the learner for the first time. Example: To apply, to hire, to use, classify examples into categories, to solve mathematical problems using the learned rule, to make measurements. Learner uses the generalized idea, or rule or procedure in new educational situations other than in which they have been educated.

4. **Analysis**

The ability of analyzing all to parts and segment of the garage or position into its elements, and the ability to see the details and relationships that connects them. Example: to analyze Poem to the ideas that make up, to analyze the experience to the steps that include that disassembles a device.

5. **Synthesis**

Opposite to analysis (that disassembles a whole into parts), is the ability to design, to assume, to solve the problem, to infer, to discover, to realize the relationship, to invent to assemble the parts in an integrated whole according to a particular principle and to see the pattern that governs the parts in one unit.

6. **Evaluation**

The ability to describe and evaluate and judge things and to express an opinion and decision-making is evaluation. Evaluation is the highest level of (OBT).

These are the six levels that Bloom spoke about, which the teacher called for to take into consideration when he was in the position for the learning goals; which prepares the student to be able to learn, and think, and analytic, Inventor, and Creative (Bloom, 1956).

Revised Bloom's Taxonomy (2001)

One of the most influential taxonomies to date is Bloom's Taxonomy of Educational Objectives, progressing from lower-level skills to higher-level skills, but it was reconsidered and revised during the 1990s by one of Bloom's former students, Lorin Anderson. A group of cognitive psychologists, curriculum theorists and instructional researchers, and testing and assessment specialists revised the taxonomy to address the needs of 21st century students and teachers. (Anderson, &Krathwohl, 2001: p. xxviii) This group was arduous and diligent like the original one.

This new taxonomy, as shown in table 2.1, reflects a more active form of thinking and is perhaps more accurate than the old version of Bloom's Taxonomy.

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Table 2: Original Bloom's Taxonomy versus Revised Bloom's Taxonomy

Original Cognitive domain	Revised Cognitive domain
Evaluation	Creating
Synthesis	Evaluating
Analysis	Analysing
Application	Applying
Comprehension	Understanding
Knowledge	Remembering

In RBT edition attention of the proponents was not on single but on two dimensions i.e. knowledge and cognition. It was suggested by L. W. Anderson and Krathwohl (2001) that learning objectives include knowledge and cognition processes for successful and easily transformation to this new two-dimensional taxonomy. Three broad categories were focused in the revised edition: terminology, structure, and emphasis.

In the revised version of the original taxonomy, both a cognitive process and a knowledge dimension were included. The components included in knowledge dimension are:

• **Factual knowledge**. The basic information about elements
• **Conceptual knowledge**. The relationships among the basic elements
• **Procedural knowledge**. Related to the process or criteria of doing something
• **Metacognitive knowledge**. Knowledge about one's own cognition
(Anderson &Krathwohl, 2001: p. 29)

On the other hand, the cognitive dimension focuses on the student cognitive processes that should be associated with the learning objectives. • This dimension includes (the following components:

• **Remembering:** Retrieval of knowledge from memory.
• **Understanding:** Constructing meaning and making sense
• **Applying:** Apply a procedure in a given context.
• **Analysing:** Breaking material into constituent or parts,
• **Evaluating:** Make judgments based on criteria and standards.
• **Creating:** combine elements to make a whole
(Anderson &Krathwohl, 2001: pp. 67-68)

Bloom's Revised Taxonomy 2001was explained by Pohl (2000): The first stage of the thinking process is named as remembering. It occurs when the students describe, make lists, tell, and name aspects of the topic. The level which shows that the students understand what they have read is termed as understanding. It occurs when they retell, infer, interpret, explain, predict, and outline knowledge. The stage of using knowledge in a new situation is applying. It occurs when the students demonstrate, implement, carry out, or describe a similar situation.

The process of breaking information into small parts is analyzing. It happens when the students organize information and determine relationship between their previous knowledge and newly gained knowledge. To develop reason to support decision is evaluating. It occurs when the students judge, choose, recommend, justify, and critique the text. Creating is known as the highest level. It occurs when the students design, construct, plan, and produce new ideas (Pohl, 2000).

Changes in OBT and RBT

As OBT was revised by one of the former students of Bloom Lorin Anderson, but it still sticks to the core components of OBT in the mid – nineties, a former student of Bloom revised the cognitive domain in the learning taxonomy. However, the changes made by Lorin Anderson do not change the core of the Bloom's cognitive levels. All revolve around the same cognitive thinking skills.

The revised edition includes some changes, although trivial but quite significant changes:

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1. Changes in terminology, such as renaming the cognitive process categories from noun to verb forms, with the idea that cognition is thinking and an active process, so the authors chose verbs as better descriptors of actions for the new taxonomy.
2. Renaming of knowledge as remembering, comprehension as understanding and synthesis as creating.
3. Another important change was the interchange of order of synthesis (create in the new taxonomy) and evaluation (evaluate in the revised edition) considering the creating category as a complex cognitive process with the assumption that creative thinking is more complex than critical thinking. In other words, it can be said that one can be critical without being creative. That's why creating is the highest cognitive level.

(Anderson and Krathwohl 2001) the principal difference between Bloom's original Taxonomy and the revised one is the renaming of a number of levels; evaluation takes place of creating, synthesis is replaced by evaluating, comprehension becomes understanding and knowledge becomes remembering. In the revised taxonomy, the highest level is creating while in the original taxonomy the highest rank was given to evaluating.

The changes which were made; the most prominent ones are following:

1- The categories were changed from noun to verb forms and slightly rearranging them (Phol, 2000).
2- The Revised Taxonomy (RT) takes into consideration the recent developments in the educational and psychological literature.
3- The RT is a two-dimensional framework: Knowledge and Cognitive processes.

Huitt, W. (2011) on the reversal of the two highest levels remarks that authors of new taxonomy gave no evidence why the highest levels were interchanged. It was further claimed that both levels are equally complex. It was further remarked by (Huitt, 1992) that omission of any of the level may result in decline of efficacy.

Classification of Lower Level Cognition and Higher Level Cognition

Lower order thinking skills are reflected by the lower three levels (Remembering, Understanding, and Applying); Higher order thinking skills are reflected by the top three levels (Analyzing Evaluating and Creating) (Anderson et al., 2001).

Ulum, 2016 states on the classification of the lower or higher level cognition that the first three low levels are knowledge, comprehension and application, while on other hand, the three higher levels are analysis, synthesis and evaluation. Taxonomy is hierarchical; each step is located at the upper steps as well, which means high levels cover the levels at down.

(Orey, 2010) states that the cognitive domain is grouped under six subsequent levels of thinking. The initial three levels or lower order skills contain: remembering, understanding, and applying, while the last three levels or higher-order skills cover: analyzing, evaluating, and creating.

HOTS involve conversion of information and ideas. This conversion happens when students analyze, synthesize, combine facts and ideas and generalize, explain, or arrive of some conclusion or interpretation. It is a process of manipulating information and ideas. Through these processes students are allowed to solve problems, gain understanding and discover new meaning (Tomei, 2005). McDavitt (1993: 20) states that "Higher Order Skills include analysis, synthesis, and evaluation and require mastery of previous levels, such as application of routine rules to familiar or new problems".

According to (Seif, 2012) HOTS are intellectual processes where students have to activate their minds in order to grasp the implicit meaning from the information provided to them, make principles and rules, realize the connections among ideas, analyze and classify, generate and combine new ideas, evaluate and judge.

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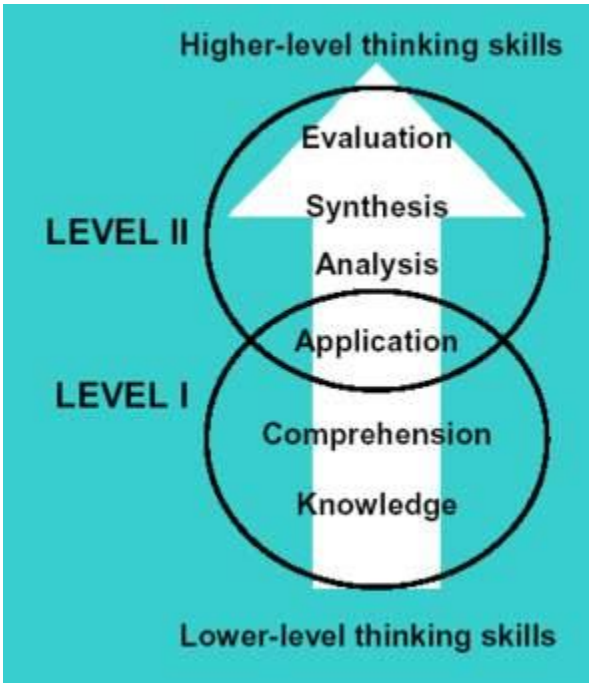

Figure: 1

Related studies on Textbook evaluation in the light of Bloom's Taxonomy

Abdelrahman (2014) analysed Grade 10 English language textbooks to investigate the questions types and levels of cognitive domain of Revised Bloom's Taxonomy. The research concluded that out of 655 questions, there was a high representation of two lower levels with 55.11 percent. The level of taxonomy got 16.18 percent. Altogether lower levels were dominant, while the next three higher levels were given only 28.71 percent which is very low.

Alfaki (2014) also conducted a study similar to the present study. The results if the study were same to all other studies in this field. The study showed that the high portion was devoted to two lower levels of 89 %. The study also revealed that no questions belonged to higher order skills. The question and activities should aim at developing both Low and High Order Thinking Skills.

Assaly & Smadi (2015) analyzed cognitive levels of questions of Master Class textbook through Blooms Taxonomy. The instrument for the categorization of cognitive levels of the question was a checklist based on Bloom's Taxonomy. The study concluded that second level of cognitive domain was given higher proportion with 52%, only 3.7% was given to Knowledge and 6% was devoted to Application while 40% was question were from higher levels.

Dabat an Associate Professor at Al-Zaytoonah University of Jordan in 2015 conducted a study to investigate three Arabic textbooks. The results of this study, like many other studies similar to this one, revealed a higher number of questions from Knowledge level with 46.45%. Collectively, 73.24% was given to lower level cognitive skills while only 26.76% was attributed to higher level cognitive skills.

Zareian et al. (2015) conducted a study to evaluate two ESP Course books taught in Iran. The result showed that there is tendency of lower order skills. It was concluded that out of 218 questions, higher value was given to lower cognitive abilities while the lowest frequency was given to higher level abilities.

One of the studies was conducted by Ulum in 2016 to evaluate Reading Comprehension Questions to check the extent of levels of Bloom's Taxonomy. The

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researcher analyzed 179 questions. It was found that there was preponderance of lower level only first two level knowledge (92, 51%) and comprehension (87, 49%).

Tangsakul in 2017 conducted a similar study to analyze comprehension questions. The objective of study was to analyze and compare reading question according to cognitive levels of RBT (2001). Total 481 questions were analyzed in the study. 416 questions from Team Up and 65 questions from O-NET were analyzed and the researcher found that both Team Up and O-NET representation of lower level questions.

Research Framework and Methodology

The procedure for the aim of the present study is the descriptive content analysis. The focus of research was on analysis of questions given in the English textbook exercises by the Punjab Curriculum and Textbook Board (PCTB). The researcher analyzed the questions to calculate the occurrence of the six levels of the cognitive domain of Revised Bloom's Taxonomy (2001). The researcher employed levels of Revised Bloom's Taxonomy in the categorization of the questions given in the exercises of the textbook designed by PCTB.

This study used mixed mixed-methods approach. First of all, the researcher analyzed the questions of the textbook separately and then compared the decision on the description and analysis of questions according to the revised Bloom's taxonomy was made qualitatively. Frequencies and reporting percentages were used in the study as a quantitative research design.

Selection of Books

The population of the study were the English Textbooks taught at 8th grade.

Sample of the Study

The sample book of study was English textbook of 8th grade produced under the supervision by Punjab Curriculum and Textbook Board. The researcher used purposive sampling technique to meet the objectives of the study.

Instrument of the Study

An evaluative criteria sheet was designed, consisting of 15 questions randomly selected from the textbook. The evaluative criteria contained 3 columns: column 1 consisted of Sr. No. Of the questions, column 2 consisted of questions randomly selected from the textbook and the last column contains coding of the Cognitive Domain of Revised Bloom's Taxonomy, i.e. (Remembering, Understanding, Applying, Analyzing, Evaluating and Creating). evaluative criteria sheet is given in appendix.

Coding Scheme

This study used a coding scheme, based on Revised Bloom's taxonomy (2001), to codify, classify, and analyze the textbook's content. The purpose of developing the coding scheme is to make it possible for the researcher to use Revised Bloom's taxonomy in analyzing the material found in under analysis textbook i.e. PCTB. The analysis detected trends in the cognitive domains inherent in the above-mentioned material. The coding categories are labelled as following:

Coding	1	2	3	4	5	6
Level	Remembering	Understanding	Applying	Analyzing	Evaluating	Creating

Research Procedure/ Data Analysis

The following steps were taken for data processing:

1. First of all, data was collected in the form of questions.
2. After the collection of data, different criteria in the form of tables were adapted from (Over Baugh and Schultz, (n.d**)**) to analyze the questions according to the six levels of cognitive domain of revised Bloom's Taxonomy (which are given in the appendices).

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3. An evaluative criteria sheet was constructed.
4. Questions were coded according to the levels of the cognitive domain of revised Bloom's taxonomy using the adapted tables.
5. After coding the data on the analysis sheet SPSS software was used for the statistical results to check the frequencies and percentages of each level represented through questions.
6. After that the frequencies and percentages were presented through tables.
7. On the basis of results and findings, recommendations and conclusions were made.

Data Analysis and Presentation

This chapter presents the analysis of the research project; the researcher presents the project's results and outcome. The aims and perspectives of this research are to find out the six different levels and their frequencies and percentages in English textbook. The levels that were being selected for this research are remembering, understanding, applying, analyzing, evaluating, and creating. The researcher goes on to explain these levels while analyzing the data from the books. One of the concerns is to see how many differences there are.

The English textbook by PCTB has 14 chapters; it is being taught in Pakistani public and private sectors and is obviously written by a Pakistani Arthur or writer. Researcher wants to see the differences of the representation of cognitive levels in the said book. Data is presented in the form of tables through frequencies and percentage of questions representing levels of Cognitive Domain of Revised Bloom's Taxonomy (RBT).

Quantitative Presentation of results of Research Question 1

Table 3: Overall results of PCTB

Overall Results of PCTB			
No	**Level**	**Frequency**	**Percent**
1	Remembering	246	54.91
2	Understanding	31	6.92
3	Applying	58	12.95
4	Analyzing	49	10.94
5	Evaluating	7	1.56
6	Creating	57	12.72
7	Total	448	100

Researcher explains the overall results of PCTB. Remembering level has 246 frequencies with 54.91 percentages. It is the highest frequency of PCTB. The lowest frequency is given to evaluating level, 7 questions with 1.56 percentages. The Understanding level had 31 frequencies with 6.92%, applying 58 with 12.95%, analyzing got 49 frequencies with 10.94%, and creating 57 frequencies with 12.72 percentages. The total frequencies of the all levels of Bloom taxonomy are 448.

Quantitative Presentation of results of Research Question 2

Table 4: Comparative Presentation of LLC & HLC

Comparative Presentation of LLC & HLC					
Total No. of Questions	**L.L.C B 1**	**Percent**	**HLCB1**	**Percent**	**Diff**
448	335	74.78	113	25.22	**49.56**

Above table is based on the frequencies and percentages of LLC and HLC of English textbook. There are 448 total no. of questions. It can be seen that major focus is on LLC with

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the 335 frequency with 74.78%; on the other hand, HLC with 113 no. of questions only 25.22% is given to this category, which is very low.

Findings

All the questions given in the textbook exercises were analyzed to quantify the frequencies and percentages of all six levels of cognitive domains of revised Blooms taxonomy.

Answering the research question No. 1, table no. 1 shows the frequencies and percentages of level of cognitive domain in textbook. The results based on the tables are discussed in the following:

- Table 3 shows the results of book 1, 54.91% questions represent Remembering level the highest value given to this level. Understanding 6.92%, applying 12.95%, analyzing 10.94% and creating 12.72%. The lowest percentage is given to "evaluating" which is only 1.56%.
- Table 4 shows the results of English textbook with reference to LLC and HLC. The results show that LLC got 74.78% in this book while HLC got 25.22%. The difference between both categories is 49.56.

Discussions

The researcher in this study analyzed English textbook (PCTB) taught at 8th Grade. The researcher analyzed 448 questions with the results that the textbook represents all the six levels of cognitive domain of Revised Bloom's Taxonomy and found that there is no balance representing the levels of cognitive domain. According to the results of research question 1 of the study, it is observed that:

There is dominance of remembering the lowest level of cognitive domain with 54.91%

In the textbook, major portion of the questions round about 55% is given to Remembering level while remaining 45% is distributed among other 5 levels such as Understanding 6.92%, Applying 12.95%, Analysing 10.94%, Evaluating 1.56% which is very low and Creating 12.72%.

As there is dominance of Remembering in the textbook, it can be concluded that like many other researches related to the current one (such as Abdelrahman, 2014; Dabat, 2015; Zareian, 2015; Ulum, 2016; and Tangsakul, 2017) there is a prevalence of LLC in the textbook and HLC in the textbook is not as dominant as LLC. The textbook emphasizes only on Remembering level which is the lowest level but got highest percentage as in many researches very similar to the current one. e, both the books PCTB and the OPE are still putting greater emphasis on LLC.

There should be a balance and equal distribution of six cognitive levels of RBT in constructing English language textbooks. There should not be so much of LLC and very little of HLC. This proportion should be regarded while producing and finalizing textbooks. Tomei (2005) states HLC as a process of manipulating information and idea and says that through these processes students are allowed to solve problems, gain understanding and discover new meaning. So while producing and designing textbooks such processes should be kept in mind by the textbook designers.

HLC are emphasized in NCEL 2006 designed by the Government of Pakistan Ministry of Education Islamabad. It is stated there in National Curriculum for English language grades I-XII 2006 designed by the Government of Pakistan Ministry of Education Islamabad that such activities are to be incorporated at each grade that cater for progressive cognitive development from lower level intellectual skills of simple knowledge and comprehension to higher order skills of analysis, synthesis and evaluation so as to nurture the ability of reasoning, problem solving, critical thinking and creativity. (National Curriculum

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for English Language Grade I-XII 2006: P, 3). So again it is suggested that while designing textbooks, textbook designers should at least consider such principles which are specified in National Curriculum for English language grades I-XII 2006 designed by the Government of Pakistan Ministry of Education Islamabad.

Recommendations

Based on the results and discussion, the present study recommends following points for the betterment and improvement of the quality of education and that of quality of English textbooks through this for the betterment students cognitive abilities:

1. EFL textbooks should be designed in such a way so that it may contain such questions which enforce both low and high level cognitive.
2. Further researches must be conducted on other textbooks to check and ensure quality education and standardised curriculum and syllabus to impose higher cognition among learners.
3. Similar research should be conducted to check whether textbooks incorporate Bloom's.

Conclusion

The researcher concluded from the above mentioned analysis and findings of this study that the textbook emphasize lower level cognition. There is prevalence of 'Remembering' level in PCTB. Round about 55% questions in the textbook 1 was given to 'Remembering', the lowest level of cognitive domain. The LLC in PCTB was given 74.78% and HLC was given only 25.22. This is not standard division in any way. The HLC in the textbook was given less important or it can be assumed that textbook designers had forgotten their self-described objectives.

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