A case study of exam test items from different perspectives in Afghanistan

Analysis of test items of math in grade seven in relation to Bloom’s Taxonomy

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Abstract

Teachers assess and try to judge their students as how much s/he learns, s/he passes or fails, and as well judgment of how much the students who learn in class. Based on exam test items teachers receive equality in education in a class. The test items which are made by individual teachers as to the learning of learners are assessed. The exam test items are different from each other. So the exams are not standardized, mathematic is seen as an abstract subject in particular. The experience of almost all the educated layer is that the context of the textbook and the context of teaching in schools, the learning level is the low level which is memorization and recalling (the formulas) are the core to motivate the students instead of to have understanding and problem solving approach.

I want to know how much teachers are aware of the learning levels, in particular in math, which levels of learning they assess and test items are measuring which learning levels. Additionally the teachers are not well aware of the goals of the subject in curriculum, in other words the national curriculum is not a document which can guide teachers in the assessment. Teachers make their test items based on textbooks they teach in schools.

The main aims of the study is to reveal some aspects of the grade subject exam by analyzing the test items from teachers and will study the weaknesses and challenges of the grade exam test items.

The study collects test items of math subject from 100 teachers in grade 7 urban schools to compare and analyze the level of learning hierarchy. Bloom’s taxonomy will be the frame of analysis. Questionnaires helped me to collect the respondents’ background data.

The analysis the test items were more of text analysis when the test items were classified into the categories used by Bloom’s taxonomy this is the reason why qualitative approach was used.

Almost 87 % of teachers (male and female) said that, they construct questions to assess students understanding level, which is the second learning/knowledge level in Bloom’s taxonomy. Overall result of analysis. While 79 % of teachers always using recalling formulas.

Concepts: Learning levels, Bloom Taxonomy, assessment, Summative and formative assessments, curriculum, exam test,
Acknowledgment

I would like to express my greatest gratitude to the people who have helped and supported me throughout my study. Pack of thanks to Amir Mohammad Mansory, and thanks to his always efforts and supports in every moment and any field of life very kindly. Thanks from initial advice and contact in the early stages of conceptual inception and through ongoing advice and encouragement to this day. I wish to thank you one again for his undivided support and interest who inspired me and encouraged me to do so, without whom I would be unable to complete the program. A special thanks of mine goes to my parents especially mother which my entire life blessing is in her always prays.

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<tr>
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INTRODUCTION

Background

Afghanistan is a country left for three decades in conflict, with negative effects on the whole country. Assault, civil war and oppressive regimes harshly limited access to education for all, girls and women in particular. After 2001 access to education has considerably increased. The number of students in general education increased from 2.3 million in 2002 to 6.2 million students in 2008 (approximately 36% females) (Ministry of Education, 2010). Still like in other countries, in Afghanistan even the literate people have some questions regarding ‘learning’ like: What is the learning? How is learning transfer? How is learning assessed? How is learning measured?

After the teaching and learning process the teachers assess their students in a particular period of time. Teachers assess and try to judge their students as how much s/he learns, s/he passes or fails, and as well judgment of how much the students who learn in class. Based on exam test items teachers receive equality in education in a class.

The test items which are made by individual teachers as to the learning of learners are assessed (Remembering, understanding, applying, analyzing, evaluating or creating). The exam test items are different from each other. This takes place in a situation that a subject is taught by teachers in a class but the test items are different even within one class, because in exam the teacher divides students in a class into groups and each group has different test items. Another problem is, that one teacher can be teach a subject in several classes but the test items are different from one class to another. Furthermore, different teachers teach the same subject or textbook in different classes in a school or in different schools, but still the test items are different from class to class and from teacher to teacher. Now the question is how fair these test items are. On the other hand the result may not much differ because the same textbooks are teach in schools all over Afghanistan and test items are made based on the same textbooks. It is more likely that, mathematic is taught as an abstract subject, and only to memorize the formulas and using of formulas’ are more motivated. The problem area will be illustrate in this study.

It is important to mention that in the educational system of Afghanistan the summative assessment is held twice per educational year. Once at the middle of educational year, and second at the end of educational year. While, formative assessment is not common in Afghanistan.

PROBLEM AREA

In Afghanistan, there are final grade exams in all subjects and all grades, which are the main source of summative assessment. The aim of the grade exam is to measure learning achievement of students to decide about the progress of students. The problem is that test items are made, organized, managed and judged by the school teachers themselves. Moreover there are no specific criteria and standards available to teachers, hence teachers make and construct the test items individually based on their own preferences and knowledge. Schools use the same textbooks, but teachers are very different from school to school in all aspect of teaching. There is big variation between teachers’ level of competence as well as skills and knowledge of assessments. It is possible that in one school the whole book is taught while in another only half of the book is taught.
Consequently students are tested for different level of subject knowledge. This means that the grade subject exams are not measuring students’ knowledge that can be used for assessment. Hence there might be great discrepancies when it comes to judgment and the exam test items. As there is no national standards and national tests, it is also not known how teachers construct their test items. Very little is known of what kind of learning is assessed by these kinds of exam test. Moreover it is not known how fairs the tests are. Finally it is also not know what kind of learning (according to Bloom Taxonomy) is measured by this kind of test items i.e. whether these test items assess recalling (memorization), understanding, application and other higher level thinking.

So the exams are not standardized, mathematic is seen as an abstract subject in particular. The experience of almost all the educated layer is, that the context of the textbook and the context of teaching in schools, the learning level is the low level which is memorization and recalling (the formulas) are the core to motivate the students instead of to have understanding and problem solving approach. I want to know how much teachers are aware of the learning levels, in particular in math, which levels of learning they assess and test items are measuring which learning levels. Additionally the teachers are not well aware of the goals of the subject in curriculum, in other words the national curriculum is not a document which can guide teachers in the assessment. Teachers make their test items based on textbooks they teach in schools.

This study aims to reveal some aspects of the grade subject exam by analyzing the test items from teachers and will study the weaknesses and challenges of the grade exam test items. Rubrics and Bloom’s Taxonomy will be used as measuring tools of the studied test items. Grade written exam test items will be collected from urban schools and will be analyzed considering the level in the learning hierarchy.

**Concepts:** Learning levels, Bloom Taxonomy, assessment, Summative and formative assessments, curriculum, exam test,

**AIM**

The aim of the study is to explore the learning levels of test items in math’s considering the levels in Bloom’s taxonomy.

**RESEARCH QUESTIONS**

1. How do teachers construct test items from the learning hierarchies’ perspective?
2. How do teachers view and perceive assessment of student learning level of math in grade 7?
3. Are there differences between teachers in constructing test items from learning hierarchies?

To conduct this study and to respond to the above mentioned research questions, the following data will be collected:

- Exam tests of math grade 7 from 100 teachers (in urban areas, male and female teachers).
- Questionnaire to teachers to collect background data and views on and perceptions of learning levels and assessment.

**OUTLINE OF THE STUDY**

This thesis covers six main sections including an introduction and problem area which was discussed above. Third section will be a literature review, forth will be a presentation of research.
method and the limitations, chapter fifth of the study, the findings, and sixth be the discussion and conclusions.

LITERATURE REVIEW

Background
According to Ministry of Education (2010) the students learning achievements will be assessed and monitored at the school level. The existing examination system will be revised into the new approaches, another standard assessment test will be established for assessing learning achievements. Furthermore, the existing semi-annual examination will be revised to better assess students annual learning achievements. In addition, to convince the MoE, the effectiveness of regular exams in both general and Islamic schools, the examination rules and system will be revised and examination strategy will be develop for each subject and plane was to distribute to all schools by 2011. Moreover, the learning achievements of students will also be measured through a standard national assessment which will be developed based on a bank of examination questions (Ministry of Education, 2010).

To date, however, there are no specific criteria, rules and standards and no revision in existing system of assessing available to teachers for both mentioned exams. Thus different students from different classes and different schools are tested by different teachers individually with different exam test items based on the textbooks which were taught in schools. It is not known to what extent these exam test items were fair for all various tested students.

Even though, in 1960 to 1970, the test items were made by central authorities (Ministry of Education) and set of envelopes that contained the test items, the envelopes were locked by the stamp of Ministry of Education sent to all schools over Afghanistan, while the transportation and logistics system was very complex for delivery. Still to specific time of examinations they deliver the envelopes. The school head officer select one envelop and gives that to the teacher. During exam the teacher was unclosed the test items and distribute them to students.

This literature review, because of time limitations, will not focus on a comparison between teachers or schools. The focus here is to compare exam test items collected from teachers of a subject of a particular grade considering the learning levels according to Bloom’s taxonomy.

ASSESSMENT
Assessment provides a numerical result concerning learning outcomes. It makes school accountable and allows teachers to know about students understanding (Black, et.al, 2003). Assessment can make teaching and learning more activities effective and can help learning in classroom’s practice. The basic purpose of assessment is to promote student’s learning (Freire, 1996), or in other words, assessment as key tool, which contributes to and improves learning through giving feedback to students (Tuttle, 2009, cited in Darmal, 2009). According to Sarkar (2012) a successful teaching needs a good quality assessment; thus assessment must be included with everyday learning process. Assessment is defined as a process of collecting information on students learning achievement and a progress which is using different procedures (Miller & Linn, 2005; Sarkar, 2012, cited in, Kapur, 2008 as well as Mussawy, 2009).

According to Black, et al, (2003) there are two major kinds of assessments; summative assessment and formative assessment. These two types of assessments are extremely useful for
teaching and learning process. Therefore, first of all I would like to describe both types of assessments as follows:

**Summative assessment**
Summative assessment normally has a formal summative test which is applied by national curriculum and also called assessment of learning. This assessment is used for the purpose of classification of students. According to this assessment teachers evaluate their learners as to what they know and do not (Black, et al. 2003). As summative assessment has a formal them so there is not any feedback to students. Heritage (2007) defined the summative assessment as a tool for summarizing what student have learned and students’ learning always been measured with ranks and grades. In addition, Kapur (2008) has described summative assessment as a process to summarize the student learning usually at the end of course or academic year which assigns learners to grades and ranks.

**Formative assessment**
Formative assessment used in teaching and learning process and is informal (Black, et al, 2003). As formative assessment is lead by instruction, the instruction should be provided in an effective and useful way. To demonstrate more, formative assessment shows what is not learnt and why. Moreover, formative assessment forms the students in the learning process, which means that if any misconception occurred, the formative assessment correct that trough feedback. Thus formative assessment is used to form the learner. Kapur (2008) added diagnostic assessment as part of formative assessment, which used to find the student’s achievement as well as diagnoses of the learning gap, by applying measures to correct the learning gap. Moreover, Kapur (2008) added that, formative assessment which is taking place during teaching and learning as an ongoing process.

According to Black, et al (2003), formative assessment is divided into two important kinds, which are called peer and self-assessment. Students are used as resources and assessors of the knowledge. Therefore, through these assessments, students can provide and manage their own learning. On the other hand, in self-assessment students can evaluate their own learning and find out the solution of their hardness. Furthermore, in peer assessment learners become resources and assessor of each other, because they help and contribute to one another. In this assessment learners accept criticism from their peer. In addition, formative assessment engages to all activities which prepare formative feedback, provided by teachers and students.

**Assessing system in Afghanistan Vs Pakistan**
In Afghanistan as well in Pakistan the type of schools are boys, girls, co-education and mixed school. Co-education is the schools in which the boys and girls sit in one class. Mixed schools are those where boys and girls are not in the same classes but use the same school area with different periods of the day or in different shifts.
In Afghanistan a school year is normally nine months which starts at the second day of each new Hijri year. The summative assessment of students is normally held twice per school year. The summative assessment is commonly used in Afghan school system, which is called Imtehan the synonym in English is examination. The latter term will be followed in this paper. The first examination is called Chahar-neemah, which means the examination of first four and half months or mid grade examination which Ministry of Education usually called semi-annual. To be brief, semi-annual examination is occurring at the middle of year or at the middle of grade period. As the meaning of the word ‘Chaharnima’ means four and half months. The second is
the final annual examination. In Afghanistan it is called examination of *Salana*. As the entire grade period is nine months, this examination happened at the end of nine months or at the end of educational year (grade). Also the word *Salana* means year. It is necessary to mention that, none of the examinations have feedback but is used only to assess and evaluate the students learning, whether the student how should pass are go to next grade.

While in Pakistan the first public examinations are held at grade 9 and 10 levels which are called Secondary School Certificate Exams (SSCE) and then at grade 11 and 12 called Higher Secondary School Certificate Exams (HSCE) (Government of Pakistan, 1998).

The present system of examination is based on the summative examination system that drives the curriculum rather than to assesses achievement. It is mostly based on assessing factual knowledge rather than students’ critical thinking and analytical skills or their understanding and comprehension. Thus teachers teach for testing, rather than for learning. The examination system reinforces approaches to teaching that reward memorization. The better the reproduction, the better and higher scores or marks awarded by the examiners. The literature on the subject reveals that there are grave issues in the examination system from paper setting, invigilation, paper marking, and tabulation to dissemination of results (Government of Pakistan, 1998).

The purpose of public examinations conducted by these Boards is clearly that of promotion, selection and certification and indicates the extent to which learners have covered a prescribed syllabus. For stakeholders at schools it is to pass them with good grades and to bring a good name to school. For some schools, teachers and students, passing examination with highest positions becomes a question of status and yet some students may want to get through them by any means (Rehmani, 2003).

**Grading system in Afghanistan Vs Pakistan**

In Afghanistan the children usually enroll at the age of seven as recommended by the Ministry of Education, but children can enroll at age lower or higher than age seven. The school system in Afghanistan is divided into three levels: primary school (grade 1-6), secondary (grade 7-9), and high school (grade10-12) (Ministry of Education, 2010).

According to Khattak (2012), Rehmani (2003) and Saeed (2007) in primary or elementary schools, the children are usually enrolled at the age of five, in the rural schools of Pakistan but children sometimes join a primary school at the age of six or even more.

In Pakistan the education system is divided into five levels: primary schools (Year1-5); middle school (Year 6-8); high school (9- 10), leading to the Secondary School Certificate, intermediate colleges or higher secondary (Year 11-12), leading to a FA (Faculty of Arts) or FSc (Faculty of Science) (pre-medical and pre-engineering, certificate) (Khattak, 2012; Remani, 2003; Saeed, 2007).

**TAXONOMY OF LEARNING**

There have been many efforts to discover a framework of the taxonomies. The taxonomy of educational objectives is a structure or a system of classification usually in a hierarchical structure (Anderson, Krathwohl, et al., 2001). For the teachers, the taxonomy supplied a system of classification, and of cognitive processes of learners, in other words, what teachers expect students to learn as a result of instruction or of the learning process. The theoretical framework was considered as exchange and communication of exam test items among examiners or classes at a variety of schools in order to measure the same educational objective. Furthermore, this
theoretical framework is a system of classifying the goals of the educational process. These classification systems allow teachers to assemble learning experiences on gradually more complex levels of thinking. Classifying levels of thinking and types of knowledge provides useful structures for curriculum decision making on what is to be learned (curriculum) and how it should be taught in the classroom. Knowing how to use taxonomies enables educators to build exact objectives for effective lesson planning.

**BLOOM’S TAXONOMY**

In Bloom’s research, he found that over 95% of test questions students encounter require them to think at the knowledge level, which is the lowest level, the level of recalling information, typically requiring students to only recall information.

The final draft of the original taxonomy was published in 1956 under the title, *Taxonomy of Educational Objectives: The Classification of Educational Goals. Handbook I: Cognitive Domain* (Bloom, Engelhart, Furst, Hill, & Krathwohl, 1956). This is referred to as the original taxonomy. The original taxonomy provided some developed definitions for each of the six major categories in the cognitive domain. The categories were **Knowledge**, **Comprehension**, **Application**, **Analysis**, **Synthesis**, and **Evaluation**. The revision of this framework was developed almost in the same manner 45 years later under the title of *Theory into Practice*, (Anderson, Krathwohl, et al., 2001). Hereafter, this is referred to as the revised taxonomy.

<table>
<thead>
<tr>
<th>Table 1: Structure of the original taxonomy</th>
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<tbody>
<tr>
<td><strong>Cognitive level</strong></td>
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<td>Knowledge</td>
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<td>Comprehension</td>
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<td>Application</td>
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<td>Analysis</td>
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<td>Synthesis</td>
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<td>Evaluation</td>
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<th>Table 2: Structure of the revised taxonomy</th>
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<tr>
<td><strong>Cognitive process</strong></td>
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<td>Remember</td>
</tr>
<tr>
<td>Understanding</td>
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<td>Apply</td>
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<tr>
<td>Analyze</td>
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assemble, differentiating

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<tr>
<th>Evaluate</th>
<th>Make judgment based on some set of criteria, decide, assess, critique</th>
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<tbody>
<tr>
<td>Create</td>
<td>Combining materials into form a new things, generating, planning, producing, inventing</td>
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The best known classification system is the system presented in Bloom et al., 1956, regularly called Bloom’s Taxonomy. According to Bloom et al (1956), this is a classification of learning objectives within the education process. Bloom’s Taxonomy divides and identifies educational objectives into three "domains": Affective, Psychomotor, and Cognitive. Taxonomy is to motivate educators to focus on all three domains, but the majority of the references to Bloom’s Taxonomy refer to and focus on the Cognitive domain. The cognitive domain circles around knowledge, comprehension, and critical thinking on a precise topic. Similar to others, this taxonomy is hierarchical, arranged in six levels from simple/concrete to complex/abstract. Bloom describes each category as a gerund, which means that learning at higher levels is dependent on having achieved prerequisite knowledge and skills at lower levels. This sorted out and structured thinking skills and objectives. Bloom’s taxonomy follows the thinking process. Before we can understand a concept or idea we have to remember it. Before we can apply the concept we must understand it. Before we can analyze it we must be able to apply it. Before we can evaluate its impact we must have analyzed it. Before we can create we must have remembered, understood, applied, analyzed, and evaluated. They are arranged below in increasing order, from lower order to higher order.

Table 3: Compare the Bloom’s original and revised taxonomy

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<tr>
<th>Higher order thinking skills</th>
<th>Original Taxonomy</th>
<th>Revised Taxonomy</th>
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<tr>
<td>evaluation</td>
<td>Synthesis</td>
<td>Creating</td>
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<td>Analysis</td>
<td>application</td>
<td>Evaluating</td>
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<td>comprehension</td>
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<td>Understanding</td>
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Low order thinking skills

LEARNING THEORIES

The scientific study of learning has dominated a long historical background, initially beginning from some famous philosophers like Plato, Aristotle and Socrates. The question ‘what is learning?’ and the general definition of learning are according to Schunk (2011) enduring changes in behaviour, or a capacity to behave in a given way, which results from practices or from experience.

In Afghanistan the teaching and learning process is in a specific path i.e. a specific framework is employed for learning process, it the sense that the learning theories (behaviorism also called conditioning, constructivism, and cognitivism) are employed behaviourism in particular for learning to takes place. A theory is a scientifically acceptable principle to explain a
phenomenon, theory provides framework for making sense of environmental observations (Schunk, 2011). Below the most common learning theories will be described.

**Behaviorism theory**

Behaviorism (Conditioning) theory dominated the learning practice for a lengthy period of time other theories of learning appear in late 20th century which introduces cognitivism and constructivism (Schunk, 2011).

According to Boghossian (2006), behaviourist theory views, learning as a change in behaviour through stimulus (if answer is accepted by externals, like teachers, e.g. if teacher asks a student, What is the capital of Afghanistan? and the students answer correctly, the teacher may reward him/her by some words such as right, good, excellent or give him or her grades then) and response (that answer is save to long-term memory. If the same question is asked in future the response is already in memory), that’s why the dialectical and mental process is totally discarded and observable knowledge is the core. Knowledge is not seen as internal but it is external observation and discover through stimuli and responses and it does not actively involve the learners in learning process. As I mentioned above, in behaviorist schools thought, learners experience a certain situation or based on external observation, which provokes a response (see stimuli and response) that means to learn something as knowledge (Boghossian, 2006).

According to Boghossian (2006), in the traditional behaviourist model, learners undergo of conditioning, e.g. in karate class if anyone goes out of line the controller (teacher) give him a punch, so everyone struggles to be in line and that was behavioural changes. In an academic site, the alternative of behavioural change is verbal behaviour (through lecture-based pedagogy). The goals of conditioning are to change behavioural such as responding accurately to a question, and reinforce responses behaviourally by assigning good grades. Therefore the reward (the words good, fine, excellent or assigning the good grads) and punishment (such as correct your answer next or do not give grades) is the important resource to validate (to give reason for) the students’ behaviours in classroom.

Behaviourism is strongly influenced by positivism. Positivism is a philosophical movement which identifies natural, observable phenomena. In the objectivist point of views learners receive knowledge from outside or only by observation and experiment (Boghossian, 2006).

To recap, this theory mainly focuses on, teacher as the center of knowledge (objective) playing a centre role, and transmitting knowledge and skills to students in a good-structured manner. To elaborate, the teacher is deliverer of knowledge and learners are passive receivers, without any prior knowledge in the learning process (Boghossian, 2006; Wang, 2007; Yilmaz, 2011).

**Cognitive theory**

Cognitive theory emerged in early twentieth century (Wood, 2004). In today’s information exploded world, students need to develop their critical thinking and lifelong learning skills to be able to access and evaluate information, they need to learn, how to learn. Behaviorism fails to explain how people make logic and process information. When the psychologists changes their mind from observable phenomena to mental processes and they argued that “people are neither machine nor animals that respond to environmental stimuli in the same way” (Maltin, 1994 cited in, Yilmaz, 2011, p. 205). That was the reason why psychologists focus on mental process (cognitive theory).
Cognitive learning theory conceptualizes the students as individuals who “construct their own knowledge as they engage in the process of interpreting and making sense of their classroom experience” (Yilmaz, 2011, p.150). The learners as active seekers of knowledge, on contrast to behaviorism, the cognitive school focuses on meaning and semantic (Winn and Snyder, 1996 cited in, Yilmaz, 2011). The cognitive school has two views 1. Learning as an active process, also gaining of the cognitive formation through which human beings process and store information. 2. Learner as an active participant in the process of knowledge achievement (Good and Brophy 1990, 187; Merriam and Caffarella 1999, 254; Simon 2001, 210 cited in Yilmaz, 2011).

This theory mostly considers knowledge achieving as mental activity involving internal coding and structuring by the learner and emphasis on what learners know and how to achieve it, what they do. The cognitive theory stresses on making meaningful and helps the learners to organize and relate new information to prior knowledge (Yilmaz, 2011). Instruction should be based on a student’s existing learning structure to be effective (Ertmer and Newby, cited in, Yilmaz, 2011).

Cognitivism is the result of Piaget’s individual cognitive theory and Vygotsky’s sociocultural theory (a theory which emphasizes the social environment as a facilitator of development and learning, in other word, one’s interaction with the environment helps learning) (Schunk, 2011; Deuble, 2003 cited in Yilmaz). There are certain differences between these two, Piaget’s, offers stages of child’s developmental process (assimilation, accommodation and equilibrium), Vygotsky offers zone of proximal development (ZPD). The ZPD represents the amount of learning possible by a student given the proper instructional conditions or the potential levels of development. In other words, ZPD refers to the distance between what a learner can do alone (actual performance level) and what a learner can do in cooperation with guidance or more advanced peers (potential performance level). Vygotsky added that “what is in the ZPD today will be the actual development level tomorrow” (Wood, 2011, p. 86). Learning can be said to occur when assistance is offered at points in the ZPD when performance required assistance (Schunk, 2011; Wood, 2011; Yilmaz, 2011).

**Constructivism theory**

Theory is a scientific explanation for learning, which allows for hypotheses to be generated and tested. According to Boghossian (2006) and Schunk (2011), constructivism is not a theory but rather, an epistemology or philosophical explanation about the nature of learning. Constructivism does not express that learning principles exist and are to be discovered and tested, but that learners create their own learning. The scientific idea of Socratic pedagogy that truth independently exists outside and is expected to be discovered, and guides or gives a way to participants to arrive at the truth, is entirely rejected by constructivism, which add that human mind does not copy reality from outside directly, but it constructs reality, therefore, constructivism claims that the students discover their own truth. In this case multiple realities will be constructed by individuals. The key assumption of constructivism is that learners are actively participating in the learning process and every participant constructs a new knowledge to their own or the internal mental state is the main factor to acquire knowledge. No one’s construct knowledge is wrong. Constructivism is completely unlike behaviorism, constructivist theory says, that the teacher should not teach in traditional way (see behaviorism) but teacher should use a method which provides instructional support and learners become actively involved with content (Boghossian, 2006).
There are different views regarding the influence of environmental and social factors on learners’ construction. Constructivism highlights the interaction of people and situations in the achievement and improvement of skills and knowledge (Cobb & Bowers, 1999, cited in Schunk, 2011). It shares with social cognitive theory the hypothesis that persons, behaviors, and environment interact in reciprocal ways (Bandura, 1986, 1997 cited in Shunk, 2011). According to Wood (2004), Vygotsky’s theory of social cognitive growth or zone of proximal development (ZPD) teachers provide instructional support such as scaffolding that will help learners to widen their learning in their zone of proximal development, and strongly stresses the role of social factors in learning. He considered language and communication inner to the intellectual development of the child, and he stressed the role of culture and history in understanding how people in different communities act. While Piaget’s theory underlines on making the internal cognitive structure and external reality reliable.

**RESEARCH METHOD**

To deal with the nature of my research questions the study collects test items of math subject from 100 teachers in grade 7 urban school to compare and analyze the level of learning hierarchy. Bloom’s taxonomy will be the frame of analysis. Questionnaires (see annex I) helped me to collect the respondents’ background data.

The math subject because this subject is the essential subject from primary school providing the root for starting to deal with practical mathematics problems in society. Besides the need to reduce the number of grades to be analyzed, the chosen grade seven is the first grade of middle schooling. For the sake of clear understanding and easy analysis, I have presented the obtained data in different categories and tables.

Whenever I went to school, some teachers thoughts strange, because I had an official letter from the Ministry of Education (MoE). That is why I introduced the research proposal to teacher(s) then announced that they voluntarily replied to the questionnaires but they had to write their exam test items at the back of questionnaires or give me a copy. Because in the Afghan education system, it is not allowed to bring test items out of school. Therefore, they were asked to write them at the back of the questionnaires. When they had filled the questionnaires, some teachers wrote the test items on the backside of the questionnaires, and sometimes I directly copied the test items.

Trying to answer to the research questions, the questionnaire was developed to collect teachers’ background data and their views and perceptions on learning levels and assessment. The type of learning or levels of learning were assessed. The questionnaire was translated to local official languages (Pashto and Dari), and it was self-administered. It was piloted with seven teachers. The pilot resulted complete a change of the questionnaires. The final approved questionnaire included eight questions dealing with teachers’ background data and their views. The questionnaires were distributed to 100 teachers (50 male and 50 female teachers) who are currently teaching at schools in Kabul province.

When I had collected the filled questionnaires with test items at the back of the questionnaires from each teacher, collected data were coded and then analyzed. Test items were analyzed, using Bloom’s taxonomy as framework. From one hand the analysis the test items was more of text analysis when the test items were classified into the categories used by Bloom’s taxonomy this is the reason why qualitative approach was used (Bryman, 2012). From other hand the result of the study is shown in tables, graphs and illustrations, so it slightly hands on quantitative approach of the study. When I counted frequencies of each item, I took the test items...
of each teacher and counted the frequencies from the levels of questions. As I mentioned before that teachers construct test items by themselves separately. Thus the number of questions was different from teacher to teacher. The analysis of the test items was used in the following way.

The questions which appear in the first level of Bloom’s taxonomy which is remembering or recalling, e.g. define triangle or radius and diagonal of circle. Or what is the sign of percentage. Or as stated in two test items “solve the following question. $2^3 \times 2^4 = ?$ 6(2+3) =?” So these types of questions need only to recall the specific definition or only need a particular formula’ or a specific principal to remember. The questions which came into second level of Bloom’s taxonomy which is understanding, e.g. find the distance between A (1, 2) and B (3, 4) and show this in figure. Or find all angles of hexagonal, these types of questions not only need any specific formulas’ but also the students must know and understand how to figure out. The questions which came under the third level of Bloom’s taxonomy which is to apply, e.g. one brick wide wall with 3m height and 5m length, the length of brick is 22 cm, height is 6.5 cm and wide is 10.5, find how many bricks are needed to complete the wall. Or the price of one barrel or drum of oil which contains 200 liter is 40000 AFG, find the price of one liter oil. These types of questions not only need formulas’ but also understanding and application as well. The learning levels of the collected test items’ were up to first three levels (remembering or recalling, understanding and application) and there were not any test items in further (analyze, evaluate and create) learning levels of Bloom taxonomy.

The Kabul city is divided into some zones and zones have compasses, all those schools which nearby to any compass are belonging to that compass. After the permission of MoE, also have permission compass to collect the data from schools. At least 30 schools belonging to one compass, and randomly I chosen 5th one, then I went to every fifth school for collecting data. The area which the research was conducted almost around 25 kilometers square.

My research is a case study because it is about a single subject math, in particular grade seven, in a specific province (Kabul), and during a specific period of time.

**Strategy and procedure**

Sometimes, it is difficult to get access to Afghan female’s teachers for an interview. The reason is that the customs and traditions do not allow this. So it is tricky to have face to face interview. What I did first was to convince the guard of the school to let me in, then the guard convinced the head officer of the school to allow me to conduct this study in the school by showing the permission letter from Ministry of Education (MoE). Then sometimes the head officer came out of school and asked for further explanation, or sometimes she directly gave me permission to enter to school. All of this was possible due to the official permission letter I had from MoE to get the help of the formal school teachers. Then after all discussions with head master and teachers I distributed the questionnaire to fill in by teachers.

This study was conducted in September 2013. Data collection took approximately a month. The procedure of participant selection was on a grade base. Only teachers of both sexes from grade seven of middle schools were selected as participants, because the study focuses only on analysis of test items of math in grade seven collected.

**Limitation of the study**

Due to the fact that no previous studies analyzing test items in math of grade seven in relation to Bloom’s taxonomy have been conducted in Afghanistan in the past, the findings cannot be compared to other studies on Afghan text books yet. However, the nature of this study in itself
can be seen as a value, and hopefully may reveal some features of the tests making school teachers.

As I mentioned above concerning the limitation of questionnaires, I could not make long questions because I could not expect the teacher to answer a long questionnaire. I decided to have a few questions, but these questions can not demonstrate all aspects although they can to a certain extent demonstrate the aspects which are related to test items such as what is assessment from teachers perspective, and how the test items can be made from their perspective and then compare their views with their real questions.

The findings cannot be generalized to all math tests in Afghanistan nor to test items in other subjects or in other grades. But if we have a look to the assessment which takes place in Afghanistan from the same textbook taught in same grade all over Afghanistan, one can claim with a great confidence that the test items do not much differ between schools, rural and urban, trained and untrained teachers. While in urban areas there are more teachers with higher education than in a rural, so one may say that their assessing method may vary due to educational level. It is claimed that teachers with higher level education and teachers who are talented in a subject are more abstract in the teaching process, more subject based and usually do not apply problem solving. So far, with a great confidence can easily be generalize.

**FINDINGS**

**Introduction**
In this section first general information, on teacher background is presented. The following sections deal with summaries of the findings according to the research questions. First teachers’ responses to questionnaire (teachers’ views on some aspects of assessments’ aims and nature) as well as features of their test items are provided. At the end differences between teachers related to their gender, education level, teaching experiences and in-service training are reported.

**General findings**
The majority of the respondents (71 %) participated in the in-services training programs, which deals with basic teaching skills and pedagogies. (See table 4).

**Table 4: General information of the respondents**

<table>
<thead>
<tr>
<th>School type</th>
<th>Teaching experiences (year)</th>
<th>Teachers’ sex</th>
<th>Teachers’ age</th>
<th>Teachers’ education level</th>
<th>Participated in in-service training</th>
</tr>
</thead>
<tbody>
<tr>
<td>Type</td>
<td>Out of all (%)</td>
<td>Years</td>
<td>%</td>
<td>Sex</td>
<td>%</td>
</tr>
<tr>
<td>Boys</td>
<td>39</td>
<td>1-3</td>
<td>10</td>
<td>Male</td>
<td>50</td>
</tr>
<tr>
<td>Girls</td>
<td>46</td>
<td>4-6</td>
<td>24</td>
<td>Female</td>
<td>50</td>
</tr>
<tr>
<td>Co-education</td>
<td>7</td>
<td>7-9</td>
<td>19</td>
<td></td>
<td>36-45</td>
</tr>
<tr>
<td>Mixed</td>
<td>8</td>
<td>&gt;9</td>
<td>47</td>
<td></td>
<td>&gt;45</td>
</tr>
</tbody>
</table>
**Teachers construction of test items from the learning hierarchies’ perspective**

As mentioned, exam test items which constructed by some 100 teachers were collected and analyzed. Bloom´s taxonomy was used as framework of analysis. Teachers assessed memorization or recalling which is wrote 'memorized issues' here, understanding is wrote 'students understanding of issues', and apply is wrote 'students can apply in practice' here in Bloom’s taxonomy. I wrote a bit change and simple otherwise teachers might confuse about the meaning of these mentioned concepts. As seen in table 5.

The teachers were asked to mention what type of knowledge/learning they assessed. Majority (87%) of teachers construct questions to assess students’ understanding level, according to learning/knowledge level in Bloom’s taxonomy. In last three (analysis, evaluate and create) levels of Bloom taxonomy none of the teachers have any test items, the overall result of analysis is shown in table 5.

<table>
<thead>
<tr>
<th>Options</th>
<th>What type of learning was assessed</th>
</tr>
</thead>
<tbody>
<tr>
<td>Memorized issues</td>
<td>8</td>
</tr>
<tr>
<td>Students understanding of issues</td>
<td>87</td>
</tr>
<tr>
<td>The students can apply in practice</td>
<td>5</td>
</tr>
<tr>
<td>Other (specify) ...</td>
<td>0</td>
</tr>
<tr>
<td>Total</td>
<td>100</td>
</tr>
</tbody>
</table>

According to graph 1, the teachers measuring of responded of ‘type of learning was assessed’ by both male and female teachers according to first three levels of Bloom taxonomy, ‘memorized issues’, ‘students understanding of issues’ and ‘students can apply in practice’. 14% of male teachers construct questions to assess memorized issues, 80% construct questions to assess students’ understanding of issues, while female teachers 2% construct questions to assess memorized issues, 94% of female teachers construct questions to assessed students understanding of issues respectively.

![Graph 1: Type learning was assessed by male and female teachers.](image-url)
Frequencies of different kinds of assessment questions used

The options of question number to four were recalling formulas, words problems, analyzing text, applying formula in real life situation and other option(s) if such ones exist.

Table 6: Frequencies of using different kinds of assessment questions, %

<table>
<thead>
<tr>
<th>Options</th>
<th>Recalling formula’s</th>
<th>Word problems</th>
<th>Apply</th>
<th>Analyzing</th>
</tr>
</thead>
<tbody>
<tr>
<td>Always</td>
<td>79</td>
<td>11</td>
<td>0</td>
<td>67</td>
</tr>
<tr>
<td>Often</td>
<td>14</td>
<td>43</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Sometimes</td>
<td>7</td>
<td>43</td>
<td>0</td>
<td>25</td>
</tr>
<tr>
<td>Rarely</td>
<td>0</td>
<td>4</td>
<td>0</td>
<td>8</td>
</tr>
<tr>
<td>Never</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Total</td>
<td>100</td>
<td>100</td>
<td>0</td>
<td>100</td>
</tr>
</tbody>
</table>

On the case of recalling formulas the majority (79 %) teachers always assessed that. Word problems were often and sometimes equally 43 % of questions, while none mention application in real life situation, and among mentioning ‘analyzing questions’ 67 % said always, non mention ‘often’ and 25 % teachers ‘sometimes’ used to assess this.

Graph 2: Frequencies using recalling formula’s as assessment by male and female teachers.

As seen in graph 2, of those teacher mentioning the assessment questions of recalling formulas 66 % said they always used, 22 % said they often used it, and 12 % male teachers said it sometimes. While 92 % always used, only 6 % often used and 2 % sometimes used among female teachers.

Teachers made different questions to measures students’ talent

Both male and female teachers make different questions to measure students’ talent. Some 80 % of the teachers always make different groups of questions concerning this. The reason is to make everyone pass. Only 2 % of teachers never made such questions. The result is seen in table 7.

Table 7: Teachers make different groups of questions to assess students’ talent

<table>
<thead>
<tr>
<th>Options</th>
<th>Make different questions, %</th>
</tr>
</thead>
<tbody>
<tr>
<td>Always</td>
<td>80</td>
</tr>
</tbody>
</table>
Often | 4  
Sometime | 10  
Rarely | 4  
Never | 2  
Total | 100

**Teachers’ views and assessment**  
Question three contains six more questions, and each of these questions has four options. The options selected by teachers, were almost half or more than half of the agree teachers at first five options, while 68 % of the teachers strongly agree and argue that ‘exam test be mainly to evaluate’. The option ‘At the result of examination students find about their strength and learn better’ was chosen by 26 % of the teacher, while the third option (At the result of examination students find their weakness, so they learn more) was 35 % teachers disagreed.

<table>
<thead>
<tr>
<th>Options</th>
<th>Students are scared by exam so they learn better</th>
<th>From the result of examination students find out their strength and learn better</th>
<th>From the result of examination students find their weakness, so they learn more</th>
<th>Exam with marks are just formality but it does help learners to learn more</th>
<th>Learners learn to get good marks in exam, not for learning</th>
<th>Exam test are mainly to evaluate learners</th>
</tr>
</thead>
<tbody>
<tr>
<td>Strongly agree</td>
<td>26</td>
<td>20</td>
<td>13</td>
<td>34</td>
<td>20</td>
<td>68</td>
</tr>
<tr>
<td>Agree</td>
<td>59</td>
<td>53</td>
<td>50</td>
<td>50</td>
<td>66</td>
<td>27</td>
</tr>
<tr>
<td>Disagree</td>
<td>11</td>
<td>26</td>
<td>35</td>
<td>12</td>
<td>12</td>
<td>5</td>
</tr>
<tr>
<td>Strongly disagree</td>
<td>4</td>
<td>1</td>
<td>2</td>
<td>4</td>
<td>2</td>
<td>0</td>
</tr>
<tr>
<td>Total</td>
<td>100</td>
<td>100</td>
<td>100</td>
<td>100</td>
<td>100</td>
<td>100</td>
</tr>
</tbody>
</table>

On question 6 in questionnaires the teachers views about ‘how teachers assess the students’. 96 % of teachers said, “we assess the students through class activities”.

**Table 9: Kinds of assessment of the students**

<table>
<thead>
<tr>
<th>Assessment of the students through, %</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Exam test items</td>
<td>4</td>
</tr>
<tr>
<td>Class activities</td>
<td>96</td>
</tr>
<tr>
<td>I don’t know</td>
<td>0</td>
</tr>
<tr>
<td>Other (specify)...</td>
<td>0</td>
</tr>
<tr>
<td>Total</td>
<td>100</td>
</tr>
</tbody>
</table>
In-services courses participation and test items levels
As we discuss above, Bloom’s taxonomy defines the different types of learning/knowledge levels, as memorization, understanding, application, analysis, evaluate and create. The taxonomy starts form low level to higher level, memorization is the first level which we name it level 1 here, understanding is level 2 and application is level 3, and so on.

Teachers’ construction of test items was analyzed in relation to their level of participation in in-services courses. As mentioned above this course deals with basic teaching skills and pedagogies. There were big differences in construction of test items in relation to participation in in-services courses. Among the teachers who had not participated in in-services courses 31 % of the test items were at level 1, 24 % and 14 % of the test items were at level 2 and level 3 respectively. While the teachers who had participated in mentioned courses, 69 % of their test items were at level 1, 76 % and 86 % test items were at level 2 and level 3 respectively.

Comparison of teachers’ expressed views and their practices of test items
The question which was posed to math teachers was ‘you bring the question(s) to students to grade their talent?’ Their responses were ‘Yes’, ‘Always’, ‘No’, ‘Never’ or ‘Sometimes’. The result from their answers indicates that they assess students to grade them according to their talent. Overall 64 % teachers said that they always made test items to grade students’ talent, while only 5 % teachers said that we sometimes made test items to grade students’ talent. (See table 10).

Table 10: Test items to grade students’ talent

<table>
<thead>
<tr>
<th>Test items to grade talents of the students, %</th>
<th>Overall</th>
<th>Level 1</th>
<th>Level 2</th>
<th>Level 3</th>
</tr>
</thead>
<tbody>
<tr>
<td>Yes, Always</td>
<td>64</td>
<td>63</td>
<td>64</td>
<td>71</td>
</tr>
<tr>
<td>No, Never</td>
<td>31</td>
<td>32</td>
<td>33</td>
<td>24</td>
</tr>
<tr>
<td>Sometimes</td>
<td>5</td>
<td>5</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>Other (specify) …</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Total</td>
<td>100</td>
<td>100</td>
<td>101</td>
<td>100</td>
</tr>
</tbody>
</table>

The result show that, 64 % the items at level 2 are made by those teachers who said they always use test items to grade the talent of the students’, while 71 % items at level 3 (application) are made by those teachers who said they always make the test items as a way to measure students’ talent. Those teachers who said they never made test items were 33 % at level...
2, while 24% teachers at level 3 how said that they never made test items to as a way to measure students’ talent.

**What type of learning do teachers assess**

As seen in table 5, almost 87% of teachers construct questions to assess students at the second level which is the level of understanding, when I analyzed math teachers test items’ of those teachers who select level 1 (memorized issues means recalling in Bloom’s taxonomy), Is shown in graph 4.

![Graph 4: Teachers assessed memorized issues with related test items.](image)

The closer analysis of the test items indicate that a group who express that they assess students memorization of subject, contradict themselves they seem to be increasingly of higher order thinking i.e. from simple recalling to application.

![Graph 5: Teachers assessed understanding of issues with related test items.](image)

Graph 5, is expressing the second level (students understanding of issues of a subject in Bloom’s taxonomy). This group also contradict themselves they seem to be decreasingly of low order thinking quite opposite to above group (graph 4) i.e. from application to simple recalling as shown in graph 5.

Graph 6, is expressing the third level (students can apply in practice of subject in Bloom’s taxonomy). This group who expresses that they assess students can apply in practice the subject, also contradict themselves, they seem to be decreasingly (7% in level 1and 0% in both level 2 and level 3) of low order thinking i.e. from application to simple recalling as shown in Graph 6.
Graph 6: Teachers assess the students can apply in practice (application) with related test items.

Test items in relation to teachers’ teaching experiences
Teachers tended to make different test items according to their teaching experiences. Teachers with teaching experience 1-3 years, 9% of their test items were in level 1. Teachers with more than 9 years teaching experiences have 48% of test item in level 1, and 38% in level 3, as seen in graph 7.

Graph 7: Levels of test items in relation to teachers’ teaching experiences

Above is the major important findings, below is the discussion of the findings.

DISCUSSIONS
As mentioned above, exam tests constructed by some 100 teachers (male and female) were collected and analyzed which Bloom’s taxonomy as a framework of analysis. There are major qualitative (the frequencies of occurring) differences in teachers views and perceptions on test items and test items in practice. As seen in findings teachers’ contradict themselves, the implications of these contradict may be: A) teachers did not know what they are said and how they are practicing, B) Teachers mostly said one thing and practicing another thing. C) Teachers may know about all these contradict but they can not change the situation or system. D) Teachers may do not know about learning levels so they contradict themselves. E) Or the teachers’ may do not know about their contradictions at all.
Teachers construct test items from learning level hierarchies’ perspective
Almost 87 % of teachers (male and female) said that, they construct questions to assess students understanding level, which is the second learning/knowledge level in Bloom’s taxonomy.
Overall result of analysis is shown in table 5. According to graph 1, 80 % of the male teachers construct questions to assess students understanding level, while of the female teachers 94 % construct questions to assess students’ understanding level, overall 87 % of student understanding level were assessed. While in their practical test items at level 2 which is the understanding learning/knowledge level in Bloom’s taxonomy, only 12 % of items were in understanding learning level. As it is mentioned in problem area, teachers make and construct the test items individually, in this case some ideas may infer: A) the understanding level may usually not much assess, rather than memorization level. B) Teachers did not know the learning level of understanding. C) Teachers knew but could not teach and understand to learners how to do. D) Teachers did not know and could not differentiate the learning levels.

Teachers construct test items of understanding level and frequencies use of recalling formula’s
As mentioned above in table 5, 87 % of teachers argue that they construct questions to assess students understanding level, while in table 6 teachers said that, 79 % always using recalling formulas’. At this point teachers contradict themselves. Recalling formula’s were 66 % always used by male teachers while 92 % always by female teachers. This happened in case when teachers did not know the meaning of memorization, understanding, apply and analyze. If we compare table 6 with practical test items, the memorization or recalling formula’s always used 79 % by all teachers, while overall 85 % of the questions were in level 1 which is the memorization level and first level in Bloom’s taxonomy, so this is not much difference. All these were in case that, application level was which is the third level of Bloom’s taxonomy 0 % used by teachers, while 3 % of test items were in level 3 which is the application level. If 3 % is not much but still in table 6 they did not have any percentage to apply option. Other contradict is, 67 % of teachers told that we always use the analyzing test items, while 0 % of their practical test items were in analyzing level, which is the fourth level of Bloom’s taxonomy.

Teachers made different groups of questions to assess students’ talent
In this section 80 % of teachers always made different questions to assess students’ talent as seen in table 7. In this case we can infer the following: A) teachers made test items which did not require much understanding, or analyzing, rather a simple recalling, so that everyone can simply pass. B) Teachers made almost all questions from recalling level to everyone pass. C) Teachers made few questions from recalling level to everyone pass. If we compare table 7 with their practical test items, as we mentioned above overall 85 % of teachers test items were in level 1. So this is easy infer that, teachers made different groups of questions to assess students’ talent, that happened even within in one class, teachers divided class into groups, the talented students in one group and teacher distributed separate items to each groups. In this case both option A and B were apply, but option C could not apply because if teachers made few question from recalling level so the overall percentage (85 %) of the questions would may decrease. This means that teachers used questions mostly from recalling level.
An overview on table 8, types of test items, the last option which is 'exam test are mainly to evaluate learners’, merge 68 % teachers was strongly agree and 27 % teachers who agree, almost all teachers at least agree on this option. It seems that teachers in contradict the selections which teachers select in table 7 (80 % of teachers make different questions to assess students’ talent). The reason is, if exam test are really to evaluate the learners, then what is the reason to made questions into different groups to everyone pass, or way teacher made three categories of questions (easy, middle and hard (the questions which is needed a bit analysis)) to everyone pass.

**Teachers assess students through class activities and assessment questions**

From another perspective if we have a view on table 9, 96 % of teachers said, they assess learners on the base of 'class activities’. Assess through class activities means to, for the student(s) have any illness or depression or any other problem, due to his/her class activities teacher(s) assess him/her, or in other words, teachers assess the student(s) through formative assessment or assessment for learning. While only 4 % teachers said that they assess students through exam items which is called summative assessment or assessment of learning. Once again teachers contradict themselves, if the assessment is made through class activities, then where is the idea of different groups of test items which they mentioned in their views and perceptions. The implication of this contradict could be: A) the teachers do not care about test items and evaluate students through class activities. B) Teachers evaluate students through class activities, but only verbally said that they evaluate students through exam test items. Moreover, another point of contradict is, most test items were form memorization as in table 6 and in graph 2, but in table 9 almost all teachers said that they assess students through their class activities rather than exam test items. Furthermore, most teachers assess the understanding level such (in table 5 and graph 1), and table 9 almost all teachers said that they assess students through their class activities rather than exam test items. In the case teachers assess students memorization level or understanding level, then why almost all teachers argue that they assess students through class activities. Now if exam is to evaluate the learners, so how comes that, teachers assess students through class activities.

From above contradicts this implication may infer: A) Teachers did not know the learning levels (memorization and understanding). C) Teachers knew learning levels but could not teach and understand to learners what to do and how to do. D) Teachers did not know and could not differentiate the learning levels with class activities.

**Test item to grade students’ talent**

According to table 10, less than two third in level 1 of the test items are and in level 2, more than two thirds in level 3 of the teachers said that they made test items to grade talents’ of students. This means: teachers use easy test items to pass everyone, but one or two items at level 2 or 3 seem to assess to which students are talented, still from summative assessment. While in another place 94 % of teachers said that they assess students through class activities which formative assessment. This means that if the student(s) do not attend the exam, or do not reply to hard questions(s) (questions which is needed a bit of analysis is called hard or difficult) still that
student(s) will be graded very good or good which is the first, second and third position in the class, or give them good marks.

In addition, as mentioned above, 80 % teacher said that they assess students’ understanding level. This is again in contradiction, if the majority of test items are easy (simple recalling questions) then have the lower percentage of teachers may want to assess students’ understanding level (level 2) but not this much high (80 %).

CONCLUSION
Findings of this investigation corresponded to a large extent to literature reviewed, the same assessment as mentioned in reviewed literature but not with analyzing of test items because I am not able to find another research in this field and compare with. The findings respond to the problem area and aim of this research. The aim was to explore the learning levels of test items in math’s considering the levels in Bloom’s taxonomy. Other study to analyze the test items have not been conducted in Afghanistan, so this limited research may useful.

As the teachers individually made different test items, it looks like the items of rural and urban may differ, but keep in mind that, all teachers made test items from the same textbook, so the findings of this study can generalized to other provinces as well.

To sum up, there are some contradictions among teachers’ views and perceptions and their practical test items. The story of these contradicts are somehow similar with the story of the egg and hen. To remove the misconceptions and contradictions there is need for another research in the future.
REFERENCES


Sarkar, T. K. (2012) Assessment in Education in India, Itachuna Government; Sponsored Primary Teachers’ Training Institute; Itchuna Dist. Hooghly; West Bengal, India, SA-eDUC Journal 9 (2)
Annexes

Annex I: English questionnaires to teachers
1. Teacher background
   a. Name: …
   b. Sex: Male □ Female □
   c. Age: … years
   d. Graduated from: …
   e. Did you join TTCs program: Yes No
   f. Did you join other capacity building programs: Yes No
   g. Did you join in-service teacher training programs: Yes No
   h. Did you join the assessment courses: Yes No
   i. Did you join the mathematic courses: Yes No
   j. What subject do you teaching in school …
   k. Teaching Experience … years.

2. The main goal of examination is
   □ The learners know what is in the textbook
   □ The learners motivate to learn
   □ To know how much learners learnt
   □ Learners grading through their talents

3. To what extent do you agree or disagree with the following sentences.
   3.1. Students are scared from exam so they learn better.
       a. Strongly agree b. agree c. disagree d. strongly disagree
   3.2. At the result of examination students find about their strength and learn better.
       a. Strongly agree b. agree c. disagree d. strongly disagree
   3.3. At the result of examination students find their weakness, so they learn more.
       b. Strongly agree b. agree c. disagree d. strongly disagree
   3.4. Exam whit marks are just formality it does help learners to learn more
       a. Strongly agree b. agree c. disagree d. strongly disagree
   3.5. Learners’ learn to get good marks in exam, not for learning.
       a. Strongly agree b. agree c. disagree d. strongly disagree
   3.6. Exam test be mainly to evaluate learners
       a. Strongly agree b. agree c. disagree d. strongly disagree

4. What kind of tests items do you use frequently?
<table>
<thead>
<tr>
<th>Kinds of question</th>
<th>Always</th>
<th>Often</th>
<th>Sometime</th>
<th>Rarely</th>
<th>Never</th>
</tr>
</thead>
<tbody>
<tr>
<td>Recalling formula’s</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Words problems</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Analyzing text</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Applying formula in real life situation</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Other (specify)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

5. Do you make different group of question to students according to students’ talent so everyone pass?
   a. Always  
   b. Often  
   c. Sometime  
   d. Rarely  
   e. Never

6. How do you assess the students?
   - Based on exams test items
   - Class activities
   - I don’t know
   - Other (specify) ...

7. What do you assess or what type of learning you assess?
   - Memorized issues
   - Students understanding of issues
   - The students can apply in practice
   - Other (specify) ...

8. You bring the question(s) to students to grade students’ talent?
   - Yes
   - No
   - Sometimes
   - Other (specify) ...

Annex 2: Pashto questionnaires to teachers

1. د معلم په اره معلومات
   1.1. نوم: ...
   1.2. جنسیت: 
   1.3. عمر: ...
1.4. له کومه رشتی خڅه فارغ پایست:
1.5. د تربیه معلم په کورسونو کي بې اشتراک کری ده.
1.6. د ظرفیت جوړونې په کورسونو کي بې اشتراک کری ده.
1.7. د داخل خدمت په کورسونو کي بې اشتراک کری ده.
1.8. ارزیابی په کورسونو کي بې اشتراک کری ده.
1.9. د ریاضی په کورسونو کي بې اشتراک کری ده.
1.10. د کوم مضمون تدریس کوی: ...

<table>
<thead>
<tr>
<th>Kinds of question</th>
<th>Always</th>
<th>Often</th>
<th>Sometime</th>
<th>Rarely</th>
<th>Never</th>
</tr>
</thead>
<tbody>
<tr>
<td>Recalling formula’s</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>Words problems</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Analyzing text</td>
<td></td>
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<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Applying formula in real life situation</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Other (specify)</td>
<td></td>
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<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
2. له امتحان ځخه اصلی هدف څه ده
چی شاگردان په یې په دې کښې کلیت چې ځکه څه دی
شاگردان زده کری ته ودهلو
چې په یې شاگردانو خرمنه زده کری کې ده
د شاگردانو درجه بندی دندی د دې د استعداد له مخی

3. د خرمنه پوری له لادې جمله سره موافق یا ناموفق یاست

<table>
<thead>
<tr>
<th>سوال</th>
<th>موافق</th>
<th>ناموفق</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.1. شاگردان له امتحان څخه ویریږی یا دوی ښه ذده کړه کوی</td>
<td>الف. کاملا موافق</td>
<td>ب. موافق</td>
</tr>
<tr>
<td>1.2. د امتحان په نتایجو کې شاگردانو ته خپل استعداد او بهه زده چې یې جوته په کېږی</td>
<td>الف. کاملا موافق</td>
<td>ب. موافق</td>
</tr>
<tr>
<td>1.3. د امتحان په نتایجو کې شاگردانو ته خپل ضعف معلومولی نو دوه زده چې یې کېږی</td>
<td>الف. کاملا موافق</td>
<td>ب. موافق</td>
</tr>
<tr>
<td>2.1. شاگردن ددی لپاره زده کری چې په امتحان کې بېش یې نری چې لاسه کری، یې دندی لپاره چې زده کری وکړی</td>
<td>الف. کاملا موافق</td>
<td>ب. موافق</td>
</tr>
<tr>
<td>2.2. شاگردن بېش د ګروپونو جلا کې، یې هر یو کامیاب شی</td>
<td>الف. هر وخت</td>
<td>ب. وکړه</td>
</tr>
</tbody>
</table>

4. تاسې عموما څه نوع امتحان اخلي

<table>
<thead>
<tr>
<th>نریولو</th>
<th>فرمولولو</th>
<th>عبارتی سو</th>
<th>حل</th>
</tr>
</thead>
<tbody>
<tr>
<td>فرمولولو</td>
<td>طبقه راولې</td>
<td>عبارتی سو</td>
<td>حل</td>
</tr>
<tr>
<td>متن تحلیل</td>
<td>بهزوندیا کی د فرمولولو</td>
<td>عملی کې</td>
<td>نور (معلوم پس کې)</td>
</tr>
</tbody>
</table>

5. ایا تاسې د شاگردانو د استعداد سره سم سوالونه په کروپولو جلا کې چې هر یو کامیاب شی?
الف. هر وخت |ب. وکړه |ج. بېش |د. ندرتیا |ه. هیچ وخت

6. شاگردان څنگه ارزیابی کوی؟
الف. امتحان په واسطه |د. صنفی فعالیت په واسطه
ب. پوهیم |هنې پوهیم

d. نور (معلوم پس کې) ... 

7. تاسې څه شی ارزیابی کوی یا تاسې څه نوع زده کری ارزیابی کوی؟
Annex 3: Dari questionnaires to teachers

<table>
<thead>
<tr>
<th>Question</th>
<th>Agreement Options</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. معلومات درباره معلم</td>
<td></td>
</tr>
<tr>
<td>2. جنس: ماد    خیر  بیلی  ج. مخالف  د. کاملا مخالف</td>
<td></td>
</tr>
<tr>
<td>3. عمر: سال    یک  دو  سه  تا  ویژه  از کدام رشته فارغ شده اید:</td>
<td></td>
</tr>
<tr>
<td>4. کورس‌های تربیه معلم را اشتراک نموده اید:</td>
<td>بیلی  خیر  ج. مخالف  د. کاملا مخالف</td>
</tr>
<tr>
<td>5. کورس‌های تربیه را ایجاد کنیم:</td>
<td>بیلی  خیر  ج. مخالف  د. کاملا مخالف</td>
</tr>
<tr>
<td>6. شاگردان به سوی اموختن تحریک شود</td>
<td>بیلی  خیر  ج. مخالف  د. کاملا مخالف</td>
</tr>
<tr>
<td>7. کورس‌های داخل خدمت را اشتراک نموده اید:</td>
<td>بیلی  خیر  ج. مخالف  د. کاملا مخالف</td>
</tr>
<tr>
<td>8. کورس‌های ریاضی اشتراک نموده اید:</td>
<td>بیلی  خیر  ج. مخالف  د. کاملا مخالف</td>
</tr>
<tr>
<td>9. کورس‌های ارزیابی را اشتراک نموده اید:</td>
<td>بیلی  خیر  ج. مخالف  د. کاملا مخالف</td>
</tr>
<tr>
<td>10. کورس‌های ارزیابی را اشتراک نموده اید:</td>
<td>بیلی  خیر  ج. مخالف  د. کاملا مخالف</td>
</tr>
<tr>
<td>11. کورس‌های ارزیابی را اشتراک نموده اید:</td>
<td>بیلی  خیر  ج. مخالف  د. کاملا مخالف</td>
</tr>
</tbody>
</table>

3. هدف اصلی از امتحان چه است:                                      |                   |
| شاگردان بفهمند که در کتاب درسی چه است                            |                   |
| شاگردان به سوی اموختن تحریک شود                                    |                   |
| بهبود کنیم که امتحانات به چه اندازه امروزه دارند                  |                   |
| درجهٔ بندی شاگردان از روی استعداد های ایشان                        |                   |

3.1 شاگردان از امتحان هراس دارند پس انها خو می‌اموزد:               |                   |
| ألف. کاملا موافق  ب. موافق  ج. مخالف  د. کاملا مخالف               |                   |
| 3.2 در نتایج امتحان برای شاگردان سعادت و اموختن خوندان اظهار می‌گردد: |                   |
| ألف. کاملا موافق  ب. موافق  ج. مخالف  د. کاملا مخالف               |                   |
| 3.3 در نتایج امتحان برای شاگردان ضعف خوندان اظهار می‌گردد، پس انها زیاد می‌اموزند: |                   |
| ألف. کاملا موافق  ب. موافق  ج. مخالف  د. کاملا مخالف               |                   |
| 3.4 نمرات برای امتحان‌های رسمی است، این همراهی شاگردان کمک می‌کند که زیاد بیاموزد. |                   |
الف. کاملا موافق
ب. موافق
ج. مخالف
د. کاملا مخالف

3. شاگردان برای این می‌اموزد که در امتحان نمرات زیادی به دست بیاورد، نه برای اینکه بیاموزد.
الف. کاملا موافق
ب. موافق
ج. مخالف
د. کاملا مخالف

6. امتحان خاص برای این است که شاگردان ارزیابی شود.
الف. کاملا موافق
ب. موافق
ج. مخالف
د. کاملا مخالف

4. عموماً شما چه نوع امتحان را می‌گیرید؟
الف. هر وقت به هیچ وقت
ب. هر وقت به یک زمانی
ج. بعضی اوقات به هیچ وقت
د. ندرتا به هیچ وقت

<table>
<thead>
<tr>
<th>نوعیت سوالهای</th>
<th>هر وقت</th>
<th>یک زمانی</th>
<th>بعضی اوقات</th>
</tr>
</thead>
<tbody>
<tr>
<td>بیباد اوردن ورودها</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>حل سوالات عبارتی</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>تحلیل متن</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>عملی کردن فرمولها در زندگی روزمره</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>دیگر (معلوم گردد)</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

5. اما شما همراه با استعداد های شاگردان سوالات را به گروه‌ها تقسیم می‌کنید، که هر یک کامیاب شود.
الف. هر وقت به هیچ وقت
ب. هر وقت به یک زمانی
ج. بعضی اوقات به هیچ وقت
د. ندرتا به هیچ وقت

6. شاگردان چه نوع ارزیابی می‌کنند؟
الف. از روز امتحان
ب. از روز فعالیت صنفی
ج. نه می‌فهمم
د. دیگر (معلوم گردد)

7. شما چه ارزیابی می‌کنید یا چه نوع اموزش را ارزیابی می‌کنید؟
الف. موضوعات حفظیه
ب. موضوعات که شاگردان فهمیده است
ج. موضوعات که شاگردان عملی کرده می‌تواند
د. دیگر (معلوم گردد)

8. شما برای شاگردان سوالاتی را می‌ارزیابی که لیاقت انها معلوم کنید؟
الف. بله
ب. خیر
ج. گاهی
د. دیگر (معلوم گردد)