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An Evaluation of TEFL Postgraduates' Testing Classroom Activities and Assignments Based on Bloom's Revised Taxonomy

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***Abstract*—In this study, we attempted to examine the quality of Iranian MA and PhD testing classes to find out how they prepare potential teachers and test makers for the journey of testing in their professional career and whether the exercises and assignments can prepare them to apply higher order thinking in their test construction process.Ten university professors holding PhD in TEFL, along with their students, participated in this study. After recording the assignments and activities, the data were listened, re-listened, and transcribed. The results showed that lower order thinking skills (69.445%) were used more than medium (30.555%) thinking skills in MA testing classroom activities, but higher order thinking skills (0%) were never used. On the other hand, medium order thinking skills (58.335%) were used more than higher order thinking skills (41.665%) in PhD testing classroom activities, and lower order thinking skills were never used. Moreover, activities and assignments given to postgraduate students first led to lower order thinking skills, next led to medium order thinking skills, and finally led to higher order thinking skills. There was a systemic pattern in the distribution of the order of thinking skills of Bloom's Revised Taxonomy in postgraduate activities and assignments. The findings of this study offer several pedagogical implications for students, instructors, and test designers in TEFL.**

***Index Terms*—Bloom's taxonomy, higher order thinking skills, lower order thinking skills, medium order thinking skills, TEFL postgraduate, testing classroom activities and assignments**

I. Introduction

Phrases such as "our students know nothing about what they must know", "they cannot think reflectively", or "they rarely introduce new ideas" have become teachers and professors' catchwords around the globe these days (Egege & Kutieleh, 2004). A quite tangible and alarming absence of high quality thinking which is often referred to as critical, reflective, or reasoned thinking has become a great concern in higher education context, a place traditionally considered as a hub of such thinking. When it comes to the higher education, this fact calls our attention to a disastrous educational crisis. This issue becomes a serious challenge when we are dealing with university students at postgraduate levels because the preconception about a postgraduate student is a person who ponders, analyses, evaluates, and creates innovative ideas, that is to say, such learners are required to be instructed not only to explain and choose but also to compose and devise a new technique and activity. The former asks students just to memorize and give back information without thinking about it, but by contrast, the latter requires learners to do something with the information they have been provided with. Anderson and Krathwohl (2001) revised Bloom's taxonomy and identified a taxonomy of learning with six levels. The taxonomy of instructional learning offers a straightforward way to classify instructional activities as they advance in difficulty. The lower levels, that are remembering, understanding, and applying, require less thinking skills while the higher levels, namely analyzing, evaluating, and creating are more challenging. Bloom's Taxonomy can assist learners to get more clarity and preciseness about teaching, testing and students' outcome. Forehand (2005) has showed the levels of Bloom's Taxonomy as stair steps; the higher the stairs, the higher the level of thinking.

Chyung and Stepich (2003) in a case study explained how the use of Bloom's taxonomy of educational objectives was instrumental in the development of graduate-level online instruction. They found that the taxonomy was an effective guideline for designing graduate-level online instruction because it helped them maintain the congruence among instructional components. Furthermore, Garekwe (2010) analyzed the examination questions administered for a four year academic period, at the University of KwaZulu-Natal School of Nursing according to bloom's level of cognitive domain. The results revealed that all six categories of the cognitive domains in Bloom's taxonomy were utilized for the four levels in the Bachelor of Nursing program. Totally, about 57% of the questions' objectives were for lower level (knowledge, recall and comprehension) whilst only 43.4% were for higher levels (application, analysis, synthesis and evaluation).

Based on this pyramid of instructional outcomes, the six levels of Bloom's taxonomy are described below:

(a) Remembering: This is the lowest level which asks a learner to define, duplicate, list, memorize, recall, repeat, and reproduce state.

(b) Understanding: This level asks learners if they can explain ideas or concepts by asking them to classify, describe, discuss, explain, identify, locate, recognize, report, select, translate, and paraphrase.

(c) Applying: It involves students in applying information in a new way which requires learners to choose, demonstrate, dramatize, employ, illustrate, interpret, operate, schedule, sketch, and solve.

(d) Analyzing: class activities and assignments for this level require students to break information into parts to explore understandings and relationships by asking them to classify, compare, contrast, differentiate, and examine.

(e) Evaluating: Evaluation necessitates justifying a stand or decision by asking students to appraise, argue, defend, judge, select, support, and evaluate.

(f) Creating: This is the highest level of instructional outcome requiring students to compose, construct, devise, formulate, predict, and infer.

Taxonomy of learning has been identified by Benjamin Bloom for the cognitive domain which includes six progressive levels (Bloom, Engelhart, Furst, Hill, & Krathwohl, 1956). As learners make headway through the increased critical thinking levels, it can be self-assured that the earlier level of thinking for that concept has been mastered. More complex thinking is required for each category in comparison with the category before it (Moseley, Elliott, Gregson, & Higgins, 2005). However, mastery of one level does not means that the students can perform at a higher level (Aviles, 2000). Aviles (2000) believes that Bloom's taxonomy of Educational Objectives is an instrument from the broad context of education that can assist new and experienced social work educators to think more exactly about what it means to teach and test for critical thinking. Bloom's Taxonomy in his regard can help social work educators to achieve greater clarity and precision about teaching, testing and students' outcome. Lots of scholars have illustrated the levels of Bloom’s Taxonomy as stair steps; if the stairs be as high as possible, the level of thinking will be higher (Forehand, 2005). As often as possible, learners need to be thinking at the high point of the stairs.

Qaisar (1999) carried out a research in order to evaluate first year teachers’ lesson plans in terms of Bloom’s Taxonomy. For this reason, the lesson plans of 67 newly certified instructors were evaluated to determine if lesson objectives developed higher-level thinking as defined by Bloom’s Taxonomy. The lesson plans were gathered during a three-year period. The results demonstrated that about less than fifty percent (41%) of the objectives were written at the knowledge level.

Cross and Wills (2001, as cited in Mosallanejad, 2008) conducted a longitudinal study in which they attempted to mix Stephen Tsuchdi’s workday activities with Bloom’s taxonomy of educational objectives to bridge the WAC/WID (Writing across the Curriculum/Writing in the Disciplines) divide. The involved instructors found exposure to Bloom’s objectives and related writing activities helpful. All the instructors planned to use them, and they became more aware of advantages of linking objectives and writing assignments.

Bastick (2002) considered the possibility that different formats of objective test questions might differentially favor males or females and that male and females might respond differently to objective questions aimed at assessing abilities at different levels of Bloom's cognitive domain. Class tests were constructed on recently taught topics, with each test containing questions in three parallel subtests, multiple-choice, true-false, and matching. Each subtest had six questions, and each of the questions was targeted to one level of Bloom's Cognitive Domain by the test writers. Results showed only one significant difference in gender performances across the levels of Bloom's Cognitive Domain and that was a female advantage at the level of Analysis. A comparison of mean male and female scores on the three subtest formats also showed only one statistically significant advantage--an advantage for females on the matching questions. This was found to be due to significant female advantages at the Analysis and Synthesis levels.

Gegen (2006) in a study addressed questioning and higher-level thinking in a low-level high school mathematic class. Results of the study suggested that by incorporating higher levels of Bloom's Taxonomy through questioning and activities students would score higher on tests, thus making them better problem solvers and critical thinkers. Her study proved that Bloom's Taxonomy influenced students' scores on tests and students' confidence in math.

Anthony (2007) in a study with pretest-posttest control group design investigated the effects of Bloom’s Taxonomy as an oral-questioning scaffold in writing performance of the learners by encouraging higher order thinking. The results of the study showed that the use of higher order questioning improves writing in response to reading; there is no difference whether it scored holistically or with points. High inter-rater reliability also has been represented in writing score. The results revealed that when students have been instructed with a higher order questioning scaffold based on Bloom’s taxonomy, their writing significantly improve. Overall, his study provided preliminary support to the importance of using higher order thinking as a questioning scaffold.

Plack et al. (2007) based on Bloom’s Taxonomy described a reliable method that determined whether students have gained higher order thinking through reflective journal writing. This method, the authors claimed, could provide a baseline for facilitating and improving higher order processing, critical thinking, and reflective practice.

Interestingly enough, we see the application of Bloom's Taxonomy in an entirely different field that is nursing. Larkin and Burton (2008) conducted a case study that attempted to review the course of treatment for one patient throughout the perioperative continuum, including the postoperative unit where a pre-arrest situation developed. In this study, they demonstrated how effective communication between caregivers could have averted a crisis and how an

educational intervention using the framework of Bloom's Taxonomy of Educational Objectives assisted staff members in being able to critically evaluate the patient scenario with the objective of preventing future patient complications. In fact a workshop using Bloom's Taxonomy of Educational Objectives was held and allowed staff members to more clearly comprehend the patient's situation. It also let the participants to gain an increased understanding of significant data and was strategic in preventing patient complications.

In a quite recent study done by Crews (2010), the effects of aligning the Virginia Standards of Learning Framework for English with Bloom's Taxonomy on student achievement was investigated. The author wanted to investigate the impacts of developing reading lesson plans in terms of the SOL English Framework aligned with Bloom's Taxonomy to continually include higher order thinking skills. He eventually found that combining Bloom's Taxonomy with the SOL English Framework had a positive effect on learners' scores in comparison with the same students' pretest and posttest scores.

In the same year, Hawks (2010) did something similar. He tried to know whether instructors who developed lessons with regard to Bloom's Taxonomy and the Virginia Standards of Learning Curriculum Framework observed increased scores on the mathematics benchmark assessment for fourth grade. However, he came to a different result. Because it was found that the mean scores of the experimental group in which the instructors developed lessons using Bloom's Taxonomy was not significantly more than the scores of the control group which used traditional, textbook bound instruction as demonstrated by scores from the Third Nine Weeks Fourth Grade Mathematics Benchmark Assessment.

Issues relating to the design, selection, and evaluation of learning activities have been relatively neglected in educational research and scholarship. To this end, they can set assignments and classroom activities to their students to lead them to develop a creative mind. Classroom activities and assignments can be a very influential learning tool in higher education due to the fact that most of the activities and assignments are supposed to be on research projects. In other words, students are expected to examine, appraise and compose and make a valuable contribution to their major. Therefore, suitable homework can be conducive to a desired result in learning. Although a host of research projects indicates the importance of creativity on testing and evaluation over several decades, little is done to study quality in Iranian MA and PhD testing classes which can reveal how we prepare potential teachers and test makers for the journey of testing in their professional career and if the exercises and assignments given to students can prepare them to apply higher order thinking in their test making. In line with the objectives of the study, the following research questions were raised:

1. How do PhD and MA testing classroom activities and assignments differ in terms of Bloom's revised taxonomy?
2. Do activities and assignments given to postgraduate students lead to higher order thinking in testing?

II. Method

Participants

Ten university professors (five female and five male) holding PhD in the fields pertinent to TEFL (the teaching of English as a foreign language) along with their students were randomly chosen. Moreover, five MA and five PhD classes at two universities were selected. All instructors were assistant or associate professors with teaching experience of five to twenty years at MA or PhD levels. One class of each professor was selected randomly. The number of the students in MA classes ranged from 15 to 20 with the age range of 24-35 and the number of PhD students was five with the age range of 27-40. Because of privacy issues, numbers were assigned to the instructors to refer to them.

Data collection procedure

Data collection for this research was carried out during the autumn term, 2015. The required data for the study were a recorded corpus obtained from MA and PhD testing classes at the universities studied. We informed the professors of the general aim of the study. We used a sound recorder to record the assignments and activities given by the professors to their students. After the provision of the databank, the data were listened, re-listened, and transcribed with the help of a PC.

III. Results

The data for this study were mainly activities and assignments which were chosen since they were the building blocks of testing courses. After recording, listening and transcribing the assignments and activities given by the professors to their students,evaluation was performed to determine what levels of Bloom's Revised Taxonomy (BRT) was used in each PhD and MA testing classroom activities and assignments.

Answer to the First Research Question

In order to answer the first research question about how PhD and MA testing classroom activities and assignments differed in terms of Bloom's revised taxonomy, we had to first investigate MA testing classroom activities and assignments and then examine PhD testing classroom activities and assignments.

MA testing classroom activities and assignments

In this section, it was attempted to examine the levels of Bloom's Revised Taxonomy used in MA testing classroom activities and assignments. As mentioned before, five MA classes were randomly selected; each class had different professors. The assignments and activities were recorded. After the provision of the databank, with the help of a PC, the

data were listened, re-listened, and transcribed.Each class's activities and assignments were examined, and three activities were randomly selected for each class at two universities. Since Bloom's Revised Taxonomy contains meaningful verbs signaling the level of complexity the students are asked, the verbs of each activity were referred in order to be able to answer the first research question. Verbs describe actions and thinking is an active process. Table 1 shows which levels of Bloom's Revised Taxonomy were used in each activity and assignment in MA testing classes at two universities.

TABLE 1:
THE LEVELS OF BLOOM'S REVISED TAXONOMY USED IN EACH ACTIVITY IN MA TESTING CLASSES AT TWO UNIVERSITIES

Universities	Classes	Activities	The verbs used in each activity	The levels of Bloom's Taxonomy
University A	Class 1	Activity 1	describe	First level: Remembering
		Activity 2	list	First level: Remembering
		Activity 3	compare	Second level: Understanding
	Class 2	Activity 1	recall	First level: Remembering
		Activity 2	reproduce	First level: Remembering
		Activity 3	examine	Third level: Applying
	Class 3	Activity 1	discuss	Second level: Understanding
		Activity 2	find	First level: Remembering
		Activity 3	outline	Second level: Understanding
University B	Class 4	Activity 1	write	First level: Remembering
		Activity 2	use	Third level: Applying
		Activity 3	practice	Third level: Applying
	Class 5	Activity 1	recognize	First level: Remembering
		Activity 2	classify	Third level: Applying
		Activity 3	distinguish	Second level: Understanding

As shown in Table 1, there were 5 levels of remembering, 3 levels of understanding, and 1 level of applying in MA testing classroom activities at University A. It meant that lower order thinking skills of Bloom's Revised Taxonomy (remembering and understanding: 8 instances) were mostly used in MA testing classroom activities at University A. There was only one instance of medium order thinking style (applying), and there were no instances of any use of higher order thinking skills (evaluating and creating) in MA testing classroom activities at University A. On the other hand, there were 3 levels of applying, 2 levels of remembering, and 1 level of understanding in MA testing classroom activities at University B. It meant that lower (remembering and understanding: 3 instances) and medium order (applying: 3 instances) thinking skills were equally used in MA testing classroom activities at University B. Furthermore, there were no instances of any use of higher order thinking skills (evaluating and creating). Table 2 shows the frequencies and percentages of the use of lower, medium and higher order thinking skills in MA classroom testing activities at both universities.

TABLE 2:
THE PERCENTAGES OF THE USE OF LOWER, MEDIUM AND HIGHER ORDER THINKING SKILLS IN MA TESTING ACTIVITIES AT TWOUNIVERSITIES

	Bloom's Revised Taxonomy							
	Lower order		**Medium Order**		**Higher order**		**Total**	
	Frequency	**Percentage**	**Frequency**	**Percentage**	**Frequency**	**Percentage**	**Frequency**	**Percentage**
UniversityA	8	88.89%	1	11.11%	0	0%	9	100%
UniversityB	3	50%	3	50%	0	0%	6	100%
Average Percentage	-	69.445%	-	30.555%	-	0%		

Figure 1 shows the percentages of the use of lower, medium, and higher order thinking skills of Bloom's Revised Taxonomy in MA testing classes' activities at two universities.

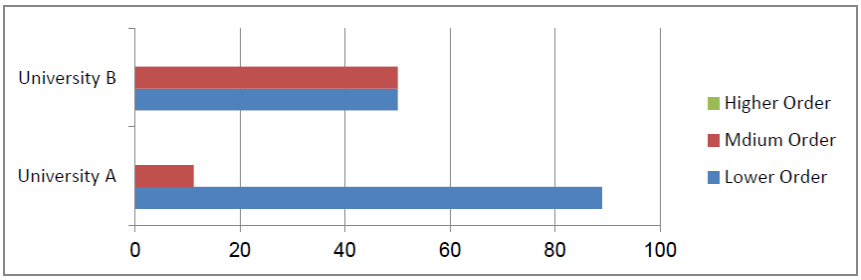

Figure 1: The percentages of the use of lower, medium, and higher order thinking skills of Bloom's Revised Taxonomy in MA testing classes' activities at twouniversities

Moreover, in order to examine whether MA testing classroom activities and assignments at two universities differ in terms of Bloom's revised taxonomy or not, chi square (X^2) statistic was used. In other words, this test was utilized to investigate whether distributions of categorical variables (the levels of Bloom's Revised Taxonomy) differed from one another. Since the sampling method in this study was simple random sampling, and the variable under study was categorical, Chi-Square Goodness of Fit Test was used. Table 3 depicts the observed and expected frequencies of the levels of Bloom's Taxonomy in MA testing classes' activities at two universities, and Table 4 shows Chi-square test for the levels of Bloom's Taxonomy in MA testing classes' activities at two universities.

TABLE 3
THE OBSERVED AND EXPECTED FREQUENCIES OF THE LEVELS OF BLOOM'S TAXONOMY IN MA TESTING CLASSES' ACTIVITIES AT TWO UNIVERSITIES

	Observed N	Expected N	Residual
Lower Order	11	7.5	3.5
Medium Order	4	7.5	-3.5
Higher Order	0	7.5	-7.5
Total	15		

TABLE 4
CHI-SQUARE TEST FOR THE LEVELS OF BLOOM'S TAXONOMY IN MA TESTING CLASSES' ACTIVITIES AT TWO UNIVERSITIES

	The levels of Bloom's Taxonomy
Chi-Square	3.267[a]
df	1
Asymp. Sig.	.071

a. 0 cells (0.0%) have expected frequencies less than 5. The minimum expected cell frequency is 7.5.

According to Table 4, the chi-square value is 3.267, degree of freedom is one, and the p value is .071. Since the p value is greater than alpha level (.05), it can be concluded that the levels of Bloom's taxonomy appears to produce frequencies that are consistent with expectations. The observed frequencies match well the expected proportions. Therefore, MA testing classroom activities and assignments at two universities do not differ in terms of Bloom's revised taxonomy**.**

PhD classroom activities and assignments

In this section, we attempted to examine the levels of Bloom's Revised Taxonomy used in PhD testing classroom activities and assignments. We randomly selected five MA classes (four classes from University B and one class from University A), each class having different professors. Similar to previous section, we recorded the assignments and activities given by the professors to their students, and then welistened, re-listened, and transcribed the data. We examined each class's activities and assignments, and we randomly selected three activities for each class at two universities. Table 5 shows the levels of Bloom's Revised Taxonomy used in each activity in PhD testing classes at two universities.

TABLE 5:
THE LEVELS OF BLOOM'S REVISED TAXONOMY USED IN EACH ACTIVITY AND ASSIGNMENT IN PHD TESTING CLASSES AT TWOUNIVERSITIES

Universities	Classes	Activities	The verbs used in each activity	The levels of Bloom's Taxonomy
University A	Class 1	Activity 1	classify	Third level: Applying
		Activity 2	analyze	Forth level: Analyzing
		Activity 3	assess	Fifth level: Evaluating
University B	Class 2	Activity 1	categorize	Forth level: Analyzing
		Activity 2	justify	Fifth level: Evaluating
		Activity 3	generate	Sixth level: Creating
	Class 3	Activity 1	compare	Forth level: Analyzing
		Activity 2	examine	Third level: Applying
		Activity 3	investigate	Forth level: Analyzing
	Class 4	Activity 1	contrast	Forth level: Analyzing
		Activity 2	check	Fifth level: Evaluating
		Activity 3	create	Sixth level: Creating
	Class 5	Activity 1	design	Sixth level: Creating
		Activity 2	outline	Forth level: Analyzing
		Activity 3	hypothesize	Sixth level: Creating

As shown in Table 5, there were two instances of medium order thinking skills (applying and analyzing) and one instance of higher order thinking skills (evaluating) in PhD testing classroom activities at University A. It means that medium order thinking skills were mostly used in PhD testing classroom activities at University A. However, there were six instances of higher order thinking skills (evaluating and creating), and six instances of medium order thinking skills (applying and analyzing) in PhD testing classroom activities at University B. It meant that medium and higher order thinking skills were equally used in PhD testing classroom activities at University B. Table 6 shows the percentages of the use of lower, medium and higher order thinking skills in PhD classroom testing activities at two universities.

TABLE 6:
THE PERCENTAGES OF THE USE OF LOWER, MEDIUM AND HIGHER ORDER THINKING SKILLS IN PHD CLASSROOM TESTING ACTIVITIES AT TWO UNIVERSITIES

	Bloom's Revised Taxonomy							
	Lower order		Medium Order		Higher order		Total	
	Frequency	Percentage	Frequency	Percentage	Frequency	Percentage	Frequency	Percentage
University A	0	0%	2	66.67%	1	33.33%	3	100%
University B	0	0%	6	50%	6	50%	12	100%
Average percentage	-	0%	-	58.335%	-	41.665%		

Figure 2 shows the percentages of the use of lower, medium and higher order thinking skills of Bloom's Revised Taxonomy in PhD testing classes' activities at two universities.

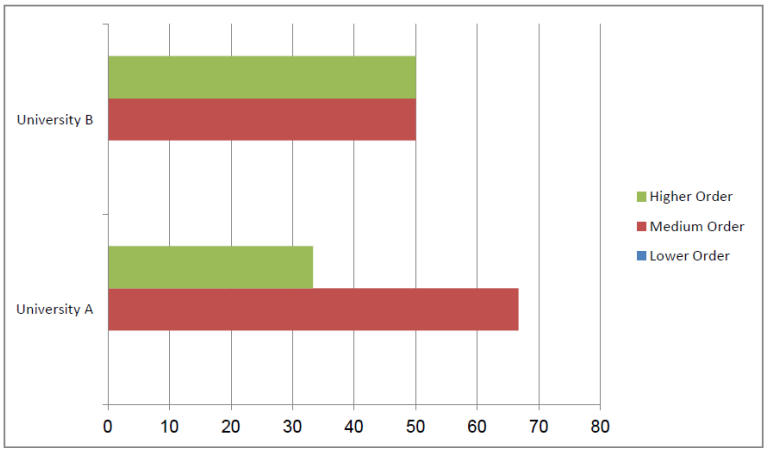

Figure 2: the percentages of the use of lower, medium and higher order thinking skills of Bloom's Revised Taxonomy in PhD testing classes' activities at two universities

Moreover, in order to examine whether PhD testing classroom activities and assignments at two universities differ in terms of Bloom's revised taxonomy or not, chi square (X^2) statistic was used. In other words, this test was utilized to determine whether distributions of categorical variables (the levels of Bloom's Revised Taxonomy) differed from one another. Since the sampling method in this study was simple random sampling, and the variable under study was categorical, Chi-Square Goodness of Fit Test was used. Table 7 depicts the observed and expected frequencies of the

levels of Bloom's Taxonomy in MA testing classes' activities at two universities, and Table 8 shows Chi-square test for the levels of Bloom's Taxonomy in MA testing classes' activities at two universities.

TABLE 7
THE OBSERVED AND EXPECTED FREQUENCIES OF THE LEVELS OF BLOOM'S TAXONOMY IN PHD TESTING CLASSES' ACTIVITIES AT TWO UNIVERSITIES

	Observed N	Expected N	Residual
Lower Order	0	7.0	-7.0
Medium Order	8	7.0	1.0
Higher Order	6	7.0	-1.0
Total	14		

TABLE 8
CHI-SQUARE TEST FOR THE LEVELS OF BLOOM'S TAXONOMY IN MA TESTING CLASSES' ACTIVITIES AT TWO UNIVERSITIES

	the levels of Bloom's Taxonomy
Chi-Square	.286[a]
df	1
Asymp. Sig.	.593

a. 0 cells (0.0%) have expected frequencies less than 5. The minimum expected cell frequency is 7.0.

According to Table 8, the chi-square value is .286, degree of freedom is one, and the p value is .593. Since the p value is greater than alpha level (.05), it can be concluded that the levels of Bloom's taxonomy appears to produce frequencies that are consistent with expectations. The observed frequencies match well the expected proportions. Therefore, PhD testing classroom activities and assignments at two universities do not differ in terms of Bloom's revised taxonomy.

Now we can answer our first research question. By looking at Table 1, we could conclude that MA testing classroom activities at University A mostly made use of lower order thinking skills, but MA testing classroom activities at University B utilized lower and medium order thinking skills equally. In Table 2, we measured the percentages of lower, medium and higher order thinking skills and found that, on the whole, lower order thinking skills (69.445%) was used more than medium (30.555%) thinking skills, but higher order thinking skills (0%) were never used.

On the other hand, Table 3 showed that PhD testing classroom activities at University A mostly made use of medium order thinking skills, but PhD testing classroom activities at University B equally utilized medium and higher order thinking skills. However, by looking at the percentages shown in Table 4, we found that, on the whole, medium order thinking skills (58.335%) were used more than higher order thinking skills (41.665) in PhD testing classroom activities, and lower order thinking skills were never used.

To put in a nutshell, lower order thinking skills (69.445%) were used more than medium (30.555%) thinking skills in MA testing classroom activities, but higher order thinking skills (0%) were never used. On the other hand, medium order thinking skills (58.335%) were used more than higher order thinking skills (41.665%) in PhD testing classroom activities, and lower order thinking skills were never used.

Answer to the Second Research Question

In this section, we tried to answer the second research question of whether activities and assignments given to postgraduate students lead to higher order thinking in testing or not. Table 9 shows the percentage of lower, medium and higher order thinking skills in MA and PhD testing classroom activities and assignments.

TABLE 9:
THE PERCENTAGE OF LOWER, MEDIUM AND HIGHER ORDER THINKING SKILLS IN MA AND PHD TESTING CLASSROOM ACTIVITIES AND ASSIGNMENTS

	Bloom's revised taxonomy		
	Lower order	Medium Order	Higher order
MA activities and assignments	69.445%	30.555%	0%
PhD activities and assignments	0%	58.335%	41.665%
Average	69.445%	44.445%	41.665%

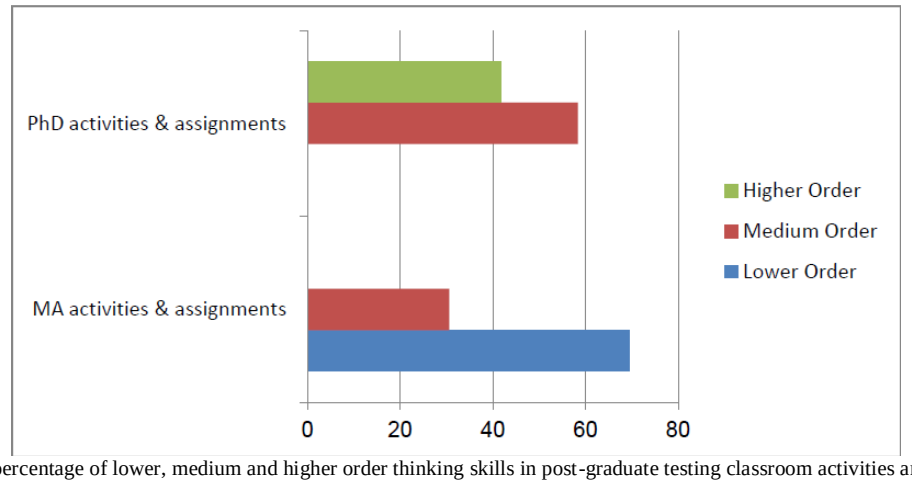

Figure 3: The percentage of lower, medium and higher order thinking skills in post-graduate testing classroom activities and assignments

We can conclude that activities and assignments given to postgraduate students first led to lower order thinking skills, next led to medium order thinking skills, and finally led to higher order thinking skills. Fortunately, systematicity was found in the pattern of learning objectives in postgraduate activities and assignments. There was a systemic pattern in the distribution of the order of thinking skills of Bloom's Revised Taxonomy in postgraduate activities and assignments. Bloom's Revised Taxonomy comprises six categories each needing accomplishment of the prior skill before the next more difficult one. The studied postgraduate activities and assignments followed the regular pattern introduced in Bloom's Revised Taxonomy which was first to master the lower order thinking skills, next to master medium order thinking skills, and finally to master higher order thinking skills. To conclude, we could say that activities and assignments given to postgraduate students led to higher order thinking in testing.

IV. Conclusion and Implications

Universities are nowadays concentrating more on active skills development and less on passive learning of theoretical ideas. Therefore, practitioners have traditionally taken it upon themselves to train their potential teachers and test makers the best they can. For universities to prepare students for careers in teaching and test making, it is advisable that they take approaches where students can significantly develop these skills. Skills development can start when students move upward from the lower levels of Bloom’s taxonomy where they acquire their elementary knowledge. Nowadays, since clear adjustment of educational goals with local, state, and national standards is beneficial, teachers must decide carefully about how to spend their classroom time. The Revised Bloom's Taxonomy clarifies if each lesson plan fits the purpose, essential question, goal or objective.

In this article, we tried to study quality in Iranian MA and PhD testing classes revealing how we prepare potential teachers and test makers for the journey of testing in their professional career and if the exercises and assignments given to students can prepare them to apply higher order thinking in their test making. The results showed that activities and assignments given to postgraduate students led to higher order thinking in testing. They first led to lower order thinking skills, next led to medium order thinking skills and finally led to higher order thinking skills. Moreover, MA testing activities and assignments mostly used lower order thinking skills, and PhD testing activities and assignments used medium order thinking skills more than higher order thinking skills, and did not use lower order thinking skills.

The findings of this study offer several pedagogical implications for learners, teachers, and textbook writers, and test designers in the realm of TEFL in particular and education in general. Bloom’s taxonomy serves as the backbone of many teaching philosophies, especially those that bend more towards skills rather than content. Teachers and learners would view content as a means to teach skills. Bloom’s taxonomy can be utilized as a teaching tool to assist to make a balance among assessment and evaluative questions in class, assignments and texts to guarantee that all orders of thinking are practiced in student’s learning. Students might benefit from a critical thinking procedure where they learn to use higher order thinking.

In light of the findings of the study, it is recommended to improve the activities and assignments given to students to cover the six levels of the new version of Bloom's Taxonomy, and train teachers and designers of curriculum to use and write activities and assignments following the new version of Bloom's Taxonomy.

Conducting the present study, some suggestions for further research came out that might be useful. With regard to this line of research, a study can be conducted tosee the representation of Bloom's Revised Taxonomy in the tests designed for these MA and PhD students. One can also investigate the teachers and students' beliefs and ideas regarding these activities and assignments. This can be done via interviewing them or some carefully designed questionnaires based on Bloom's Revised Taxonomy. In this way, we can see the representation of Bloom's Revised Taxonomy in classroom activities and assignments from the point of view of actual users. Other similar studies can be carried out to examine the representation of Bloom's Revised Taxonomy in course books that are taught in classrooms.

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