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SOI: [1.1/TAS](#) DOI: [10.15863/TAS](#)

## International Scientific Journal Theoretical & Applied Science

p-ISSN: 2308-4944 (print) e-ISSN: 2409-0085 (online)

Year: 2022 Issue: 08 Volume: 112

Published: 30.08.2022 <http://T-Science.org>

Issue

Article



Shakhnoza Mirakhmatovna Ismatova

Uzbekistan State World Languages University

PhD Researcher

[doctorshaxnoza@gmail.com](mailto:doctorshaxnoza@gmail.com)

## THE EXAMPLE OF FOREIGN COUNTRIES ON THE IMPROVEMENT OF ASSESSMENT TECHNOLOGIES IN ENGLISH LANGUAGE TEACHING

**Abstract:** This article explores the application of different educational taxonomies in measuring students' cognitive learning outcomes. The objectives were to compare two educational taxonomies—namely, the Structure of the Observed Learning Outcomes (SOLO) taxonomy, Bloom's taxonomy. Higher and lower cognitive domains of learning objectives is specified by using necessary action verbs classified in assessment. Consequently, learning outcomes for mentioned course can be created by this methodology.

**Key words:** credit, module, assessment, cognitive, SOLO taxonomy, Bloom taxonomy, degree, skill.

**Language:** English

**Citation:** Ismatova, Sh. M. (2022). The example of foreign countries on the improvement of assessment technologies in English language teaching. *ISJ Theoretical & Applied Science*, 08 (112), 383-387.

**Soi:** <http://s-o-i.org/1.1/TAS-08-112-40> **Doi:**  <https://dx.doi.org/10.15863/TAS.2022.08.112.40>

**Scopus ASCC:** 1200.

### Introduction

President of the Republic of Uzbekistan Sh.M. Mirziyoev's address to the Oliy Majlis dated January 24, 2020 proposed naming 2020 as the "Year of Science, Enlightenment and Digital Economy Development", gradually increasing the level of coverage of school graduates with higher education, revising educational directions and taught subjects, halving the number of subjects not related to specialization, transfer of higher education institutions to self-financing, complete digitization of the education sector, wide implementation of the public-private partnership mechanism in the education sector are the urgent issues of the day.

In addition to increasing the level of education of the people, the factor indicating the competitiveness of our nation was highlighted in this appeal, and the problem of creating a national education system that meets modern requirements and world standards was also reflected in the document.

The issue of education is one of the important tasks in many countries of the world, and improving the quality of higher education is one of the main problems of the 21st century. In the context of globalization, the reform of the education and science

system is a factor that determines the solution to many problems, and fundamental reforms aimed at increasing its flexible capabilities, meeting the new requirements of global competition, are being implemented. The main goal of increasing the adaptability of higher education institutions and educational programs is to implement the reform of the academic and organizational structure, which is planned by updating the infrastructure, educational methods and technologies, improving the pedagogical process, and improving the quality of the teaching staff.

This stipulated the need for reforms in higher and post-higher education to create a national module, taking into account the basic conditions of the Bologna Declaration.

The Bologna Declaration envisages not only a revision of the structure, but also a change in educational programs. Educational plans and educational programs to the educational process is carried out by educational organizations [1].

The educational process consists mainly of training sessions and control processes. Learning activities include all types of academic activities, independent student learning and professional

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practices, and monitoring processes show the extent to which students have mastered the curriculum.

Assessment of students' knowledge, skills, and abilities cannot be determined through the traditional "test" method of examination. The ability to apply acquired knowledge is the most important part of education, and recent research in the field of education has proven. During the educational process, using active methods of language learning, discussing the material or applying the learned knowledge to real-life problems, the student's classroom time will be more effective. It is these methods of teaching that develop the student's skills such as independent reading, critical thinking, applying their knowledge to problems, engaging in discussion, and working as a team.

Based on international experiences, modernization of higher education and advanced educational technologies, the use of various taxonomies in the evaluation of students' educational results has been systematically established. There are three educational taxonomies widely used in world pedagogy, i.e. Structure of the Observed Learning Outcomes (SOLO) Taxonomy in English, Bloom Taxonomy Bloom's taxonomy and Reflective thinking measurement model. The reflective thinking measurement model was used throughout our study. In this, the planning and assessment of learning objectives began to be used consistently.

Taxonomy describes and classifies different types, categories and levels of education. They are

often used as a guide for curriculum development, teaching methods and strategies, and assessment.

The SOLO taxonomy was developed by Biggs and Collis in order to control the activity and quality of education in the classification and evaluation of students' responses corresponding to different cognitive stages [5]. The students' answers to the assessment tasks are carefully analyzed and approved for use in a wide range of disciplines [11]. The SOLO taxonomy is a way of interrelating responses at a given level of educational quality. In addition to increasing students' knowledge, the system complexity will also be high. In the initial stage, most of the learning is quantitative and the amount of skill increases. In the next stages, the quality of learning increases as the skills are structurally integrated [6, p.50-63]. There are two main goals of the curriculum: the quantitative one focuses on increasing knowledge, while the qualitative one focuses on understanding. It has five levels: Prestructural (lowest level), Unistructural, Multistructural, Relational and Extended Abstract (highest level). It increases the use of systematic complexity: sequence, organizational dimensions and related principles is a hierarchical model [9]. Burnett and Trigwell and Prosser added sub-levels to the SOLO taxonomy, making it nine in total, and used this new scale to evaluate student responses, clarifying categorization [8, p. 567-581].

Below are examples of the levels of observed learning outcomes of the SOLO taxonomy, the active verbs used at each level, and the types of learning objectives that students should complete (see Table 1):

**Table 1. Observed learning outcomes of the SOLO taxonomy degrees**

| Degree              | Student activity  | Verbs used  |
|---------------------|---|---|
| Prestructural [1]   | Teaching is just a matter of getting students to approach their appropriate learning. Students don't understand question, just guessing   | Table 1 does not show the pre-structural level of the SOLO taxonomy. This is because there is no learning on the pre-structural level, and there are thus no corresponding indicator verbs (Çetin & İlhan, 2016). |
| Unistructural [2]   | Approaches to learning are of two kinds, surface, which is inappropriate for the task. Students can only mention and deep which is appropriate. Only mention one relevant piece of information  | Memorize, recite, define, name, label, match, recall, quote, draw, portray, imitate, recognize  |
| Multistructural [3] | Approaches to learning are of two kinds, surface, which is inappropriate for the task and deep, which is appropriate. Students can pick up many related aspects and elaborate each point with illustrations   | Classify, list, discuss, show, select, do basic calculations, tell, report, separate, summarize, combine, describe  |
| Relational [4]      | The approaches come about partly because of student characteristics, but also because students react differently to their teaching environment in ways that lead them into surface or deep learning. Students can overall generalization of major concepts in the whole one | Apply, compare/contrast, differentiate, organize, analyse, calculate the relationships between X and Y, interpret, review and rewrite, structure, transform, infer, sequence, explain cause                       |

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| Extended abstract [5] | Students can consistently generalize ideas, question or criticize conventional practices and/or underlying principles of the discipline. | predict, hypothesize, generalize, construct, reflect, form a theory, invent, develop an original product, transfer to a different area, prove, solve from first principles, evaluate |
|-----------------------|--|--|

Bloom's taxonomy was developed to classify learning objectives into cognitive levels [7]. It allows pedagogues to systematically assess students' knowledge [4]. Two dimensions, knowledge and cognitive process, were later revised by Anderson and Krathwohl. This distinction depends on the research question, the critical question in the knowledge dimension is: "What do students know?", and in the

cognitive process dimension is: "How do students think?". The measure of knowledge consists of four categories: factual, conceptual, procedural, and metacognitive. The cognitive aspect of Bloom's Taxonomy consists of six levels, from simple to complex and from concrete to abstract: remembering, understanding, applying, analyzing, evaluating, creating [3, 11, p.212-218] (see Table 2):

**Table 2. Cognitive levels of Bloom's taxonomy**

| Degree        | Student activity   | Verbs used  |
|---------------|--|---|
| Remember      | Remembering of previously learned material, including facts, conventions, principles and theories. It represents the lower level of learning outcomes in the cognitive domain.   | to determine, describe to tell, make a list, to write, to find, equalization, to remember, choose, memorization |
| Comprehension | Students can able to grasp the meaning of material. It involves translation and interpretation (explaining and summarizing) of materials.  | explanation, comment to plan, discuss, to guess, repetition, translation, to compare, processing                |
| Application   | Students can able to use learned material in new and concrete situations. This may include the application of rules, methods, concepts, principles, laws and theories.   | processing, finish, to solve, adaptation  |
| Analysis      | Students can able to break down materials into its component parts so that the organizational structure may be understood. Skill in comprehending the interrelationships among the ideas and recognize unstated assumptions. | analysis, highlight, to compare, differentiate  |
| Synthesis     | Students can able to put parts together to form a new whole. Learning outcomes in this area stress creative behaviors, with major emphasis on the formulation of new patterns or structures.                                 | to judge, choose, to decide, whitewash, to discuss, discuss, evaluation, to protect                             |
| Evaluation    | The ability to judge the value of material. Judgement criteria may be from internal or external.   | create, to invent, make up, to guess, to plan, formation, to assume   |

The assessment process is balanced to include measures of knowledge, and helps to develop and develop the theoretical basis of the student's

knowledge and skills. We considered the corresponding high levels of the two taxonomies by analyzing the evaluation dimensions (see Figure 1):

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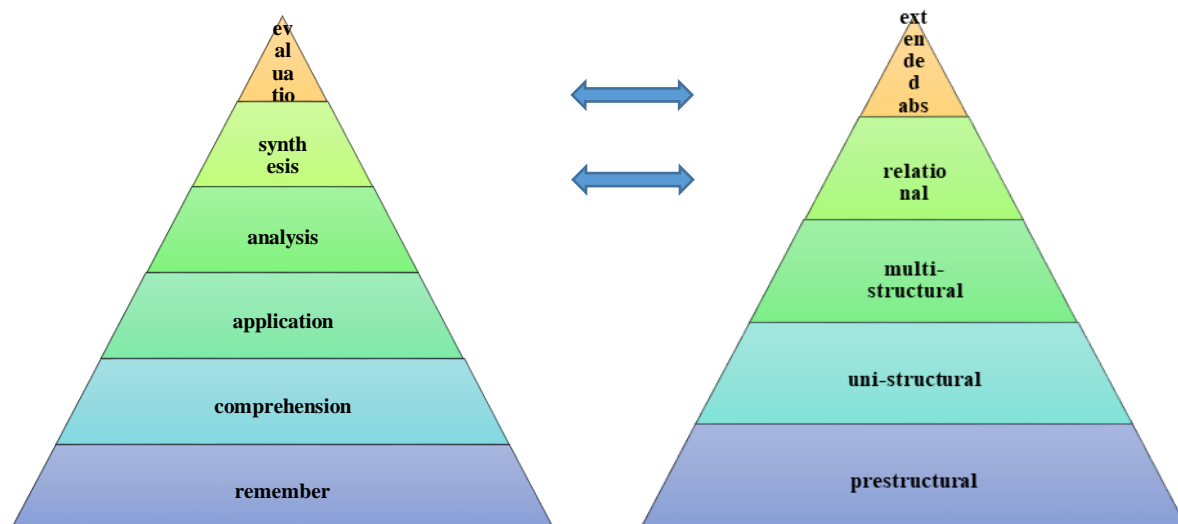


Figure 1. Levels of Bloom's and SOLO taxonomies

### Conclusion

Thus, while all verbs conform to their generally defined levels, some are ambiguous and flexible, indicating that they are related to a specific direction. The following taxonomies aim to assess students' knowledge, skills and competencies. Assessment of student learning is actually a complex measure that measures the student's ability to perform an activity. Therefore, it is important in assessment to focus on the skills that students need to acquire, that is, what they need to know and learn. In general, students should be able to form and perform outcome-based learning by the end of the learning process using defined verbs,

and technologies like this make it easier to explain to them the importance of learning about the subject.

Looking at the findings of this study, the two educational taxonomies seemed to be closely related to each other, each could complement the weaknesses of the others. In Bloom's taxonomy, the educational task has one level of cognitive complexity, in contrast, the SOLO educational result can be evaluated at five different levels of complexity, and the reflexive expression of thoughts, which is important for the continuous development of professional skills in the activity of independent learning, is improved in an integrated manner.

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