

STUDENTS' RESPONSES TOWARD COGNITIVE ASSESSMENT BASED ON HIGHER ORDER THINKING SKILLS (HOTS) ASSISTED BY THE QUIZIZZ APPLICATION

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Abstract

The development of the world of education is rapidly, therefore every student is required to have the ability to think critically and creatively. So to be able to achieve this ability requires innovation both in the use of learning media interactive and HOTS-based cognitive assessment instruments. In the field of education instruments are used to measure learning achievement of students, the success of the learning process and the development of results study. Quizizz is a game-based educational app that brings multiplayer activities to the classroom and make learning in the classroom more fun and more interactive. Quizizz application can use by the teacher in teaching and learning process. The purpose of this research was to find out the students' responses toward cognitive assessment based on higher order thinking skills (hots) assisted by the quizizz application. Case study was used in this research.Data was collected by conducting observation and giving questionnaire. Based on the result, most of students have positive statements toward quizizz application during the assessment process. Almost students experienced fun and interesting with the quizizz as learning tool of assessment.

Keywords: Students' Response; Assessment; HOTS; Quizizz

INTRODUCTION

English is an important international language that can connect people with the world in various aspects including aspects of education. Communication can be realized if a person masters four language skills: listening, speaking, reading, and writing. This also applies to the process of learning English which is called listening and reading as receptive skills while reading and speaking as productive skills (Megawati, 2016). In Indonesia, the educational process carried out by teachers must also be adapted to the curriculum that applies, namely the 2013 Curriculum. This curriculum emphasizes character education for students. Teachers are needed qualified students who are able to apply the 2013 Curriculum, which is focused on these changes. First, improving the quality of teachers in the learning process emphasizing cognitive, affective, psychomotor aspects through test-based and portfolio assessments. This means that in learning, teachers must be able to improve these aspects so that students can be more active in the learning process. Second, improving the quality of teachers in change number of subjects. Third, improving the quality of teachers in changing the number of time allocation. In the implementation of the 2013 Curriculum, English proficiency is formed through continuous learning; starting with increasing knowledge competence type, rules and context of a text, followed by competency skills presenting a written and spoken text both planned and spontaneous with pronunciation and proper intonation, and lead to the formation of politeness and language attitudes appreciate the beauty of language. In learning English, all aspects of learning (objectives, materials, processes learning, media, resources, and assessment) are attempted to approach the use of language English in the real world outside the classroom. In this context, linguistic elements (grammar and vocabulary, including pronunciation and



writing) is more appropriate to be seen as a tool, isn't it as a goal: a tool to carry out language actions correctly, strategically, appropriately purpose and context.

Implementation of learning English must be designed in a complete and systematic way learning takes place interactively, inspiring, fun, challenging, motivating students to participate actively, as well as providing sufficient space for initiative, creativity and independence in accordance with talents, interests and physical development as well as the psychology of students (Kustini, 2016). In the world of education, there are several educational games that can be utilized existence. Educational games consist of several components such as sound, graphics, video, and animation. A significant advantage is that there are components that can improve memory such as animation, so that students are able to store and collect material in memory for a longer period of time than using conventional educational methods (Citra&Rosy, 2020). Quizizz is a game-based educational app that brings multiplayer activities to the classroom and make learning in the classroom more fun and more interactive (Purba, 2019). Quizizz has the advantage that the questions are presented in Quizizz has a time limit, students are taught to think properly and fast in working on the questions on the Quizizz. Another advantage that exists in Quiziz is the answer to the questions that will be displayed with colors and pictures interesting automatically according to the order of the questions presented. Quizizz is a digital game which is a fun multiplayer class activity, which allows all students to practice together with a computer, IPad, tablets, and Smartphones. It also has an iOS app, Android app, and Chrome app for students (Ju&Adam, 2018). The development of the world of education is rapidly, therefore every student is required to have the ability to think critically and creatively. So to be able to achieve this ability requires innovation both in the use of learning media interactive and HOTS-based cognitive assessment instruments. An instrument is a tool according to educational criteria, so that it can be used as a tool for measure an object. In the field of education instruments are used to measure learning achievement of students, the success of the learning process and the development of results study. Assessment instruments can also be interpreted as measuring tools used for collecting data can be in the form of tests and nontests (Karerina, Pitoewas, & Putri, 2020). Cognitive domain is the intellectual ability of students in thinking, knowing and solving problem. Cognitive processes that show thinking skills according to the taxonomic revision Bloom is formulated into six categories, namely remember, understand, apply, analyze, evaluate and create From this explanation it can be concluded that for achieving maximum cognitive abilities requires quite a long stage. By therefore the role of the teacher in determining the right instrument according to needs students are needed, especially in some text material including: narrative text. So, based on the explanation above, the researchers are interested to explore the students' responses toward cognitive assessment based on higher order thinking skills (hots) assisted by the quizizz application.

METHOD

Case study was conducted in a Senior High School in Cimahi. The subject of the research consist of 20 students. Ghufron&Nurdianingsih (2020) explained that case studies are used in many situations to contribute to our knowledge about individual, group, organizational, social, political, and related phenomena. This research was focused to explore the studens' responses toward cognitive assessment based on higher order thinking skills (hots) assisted by the quizizz application. Therefore researchers use case study to achieve the study objectives well achieved. Data was collected by conducting observation and giving questionnaire. Observation used to find out the students' performance and characteristics during learning activities. Questionnaire to understand the students' responses toward assessment.



RESULTS AND DISCUSSION

Results

In this study, the researchers gave a HOTS-oriented question test assisted by the Quizizz application. The results are presented by dividing student answers into three categories, namely high, medium, and low ability. The assessment instrument was developed based on HOTS indicators include the ability to analyze (C4), evaluate (C5), and create (C6) based on Bloom' Taxonomy.



Figure 1. Bloom's Revised Taxonomy

(1) indicator of the ability to analyze (C4) which has been developed are ability to analysis of factual, conceptual, procedural, and metacognitive knowledge; (2) indicator of the ability to evaluate (C5) which has been developed are ability to evaluate of factual, conceptual, procedural, and metacognitive knowledge; (3) Indicator of the ability to create (C6) that has been developed are ability to create of conceptual, procedural, and metacognitive knowledge; (4) the HOTS assessment instrument as assessment for learning is effective to train student's HOTS and effective measure student's thinking skills in accordance with the level of each student's thinking. Levels of thinking on C1, C2, and C3 are low-order thinking, and thinking levels in C4, C5 and C6 are high-order thinking levels (Higher Order Thinking). The researcher was drafting the HOTS questions consisting of 25 multiple-choices assisted by the Quizizz application. Based the observation the students are enable to answer the questions through this application. The result of assessment, the researchers found that 12 students (higher level), 6 students (middle level) and 2 students (low level).

At the end of assessment process 20 students were given around 15 minutes to fill the questionnaire that consist of five questions related to their experience during assessment through Quizizz. The result described below:

Table1. The Result of Questionnaire						
Questions	Percentage					
	Yes	No				
The process of assessment today is interesting	85%	15%				
The assessment is easy to answer	80%	20%				
The activity provides a test challenge	90%	10%				
The Quizizz application is fun	95%	5%				

Students' Responses Toward Cognitive Assessment Based on Higher Order Thinking Skills (HOTS) Assisted by The Quizizz Application |313



Volume 6, No. 2, March 2023 pp 311-315

The	Quizizz	application	helps	me	to	75%	25%
understand the assessment							

From the percentage of the questionnaire above had shown that there were 17 students (85%) who strongly agree that the process of assessment is interesting and 3 students (15%) who undecided with the statement. The second statement, there were 16 students (80%) who agree that the assessment is easy to answer, but 4 students (20%) undecided with the statement. The third statement, there were 18 students (90%) who strongluy agree that activity provides a test challenge, and 2 students (10%) undecided with the statement. The fourth statement, 19 students (95%) who agree that quizizz application is fun, but not for one students (5%). And for the last statement, 15 students who agree that quizizz application can help them to understand the assessment and 5 students (25%) undecided with the statement.

Discussion

Based on the result, most of students have positive statements toward quizizz application during the assessment process. Almost students experienced fun and interesting with the quizizz as learning tool of assessment. It as also in line with the researchers' observation that all students who attended were enthusiastic. It means that quizizz as beneficial application to handle an assessment. The features on Quizizz are interesting and easy to use. It is in line with previous research that conducted by Zulfa & Ratri (2022).

CONCLUSION

The results showed the level of thinking ability of students in answering HOTS practice questions still needed improvement. Students who have high learning abilities are better at answering HOTS-oriented questions compared to students in the medium and low categories. Quizizz application can use by the teacher in teaching and learning process. Quizizz also provides features for the teachers to design lesson sheet per sheet so enable students to follow the lesson step by step and also work or share each orher with friend, so this case also improve students 'motivation.

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