

## **AN ANALYSIS OF STUDENTS' LEVEL OF CRITICAL THINKING IN FINAL EXAM**

**NOVIA GERUNGAN, MEITY MUNTUUNTU, RINNY RORIMPANDEY**

*English Education Department, Faculty of Language and Arts*

Correspondence author: [meitymuntuuntu@unima.ac.id](mailto:meitymuntuuntu@unima.ac.id)

*Received: 12 January 2022*

*Accepted: 20 January 2022*

*Published: 24 January 2022*

**Abstract** : This research aims to determine whether the final exam that is given by the teacher to students can encourage students to think critically. This research was conducted in Tondano. The method used in this research was the quantitative method. The researcher took the data from about English language exam consisting of 40 questions. In 40 questions there are 5 kinds of test that is examined. Research using the theory of Bloom's Taxonomy. After being analyzed based on the theory of bloom's taxonomy, all the contents of the questions contain 100% knowledge. In 40 questions there is no comprehension, application, analysis, synthesis, or even evaluation. The test results showed that the 40 questions are at the level of low order thinking because it's a matter of the English exam is otherwise not able to encourage the students in critical thinking according to the theory of Bloom's Taxonomy on high order thinking level.

**Keywords:** *critical thinking, test, high-order thinking level, bloom taxonomy.*

### **INTRODUCTION**

Definition of education is very closely associated with the school. Within the school, this is what happens teaching-learning process. In the learning process. Learning a new language is not easy. A language is a communication tool for human life. The language is used to express feelings, emotions, ideas, and desires to each other (Mogea, 2019). Learning English as a foreign language is not easy for Indonesian students because it is not their mother tongue. On the other hand, (Bambulu, Pelenkahu, & Sanger, 2021) argue that language is the basis of

communication, without linguistic communication it is impossible to construct and without communication, people cannot interact with others. (Mogea, 2019) also states "English is an international language used worldwide for educational, technical, political and commercial purposes." Another view of English is that English itself plays an important role in enabling people around the world to interact, communicate, communicate ideas, and collaborate (Tahrin, Wowor, & Liando, 2018). Language is a tool of self-expression, communication, and social control. Every society must have a language. With the help of language, people can think and develop knowledge (Heaton, 1988).

Teaching English as a foreign language in Indonesia focuses on the development of four language skills: reading, writing, speaking, and listening. This test is required to measure a student's critical thinking while learning English. Taking tests is also a means of determining a student's subject proficiency, and tests can be used as a tool to measure or evaluate students, programs, and methods (Delatu, Wowor, & Kamagi, 2020; Hampp, 2019).

According to (Arikunto, 2013), a test is a set of questions that assess individual or group skills, knowledge, intelligence, and abilities. It measures the extent to which educational goals have been achieved. Without exams, the results of the educational and learning process will fail. According to (Arifin, 2016), a test is a technique used to perform a measurement activity when there are a large number of questions or a set of tasks that the learner needs to perform or answer to measure aspects of the learner's behavior. The (Sudijono, 2011) test is a method (available) or process (to be completed) of measurement and evaluation in education, in the form of a task or set of tasks, in the form of a question. (Answer) or command by test participant (execute). Therefore, it is possible to generate a value that symbolizes the behavior or performance of the tester (based on the data obtained from the measurement results); a value that can be compared to the value

achieved by the tester, or a value of a particular criterion value. In this case, it is important for the teacher to look at the tests presented to the student to ensure that the student can demonstrate their performance in relation to the set goals (Cangelosi, 1995; Lambe, 2017).

Bloom's Taxonomy is a method developed by Benjamin Bloom (Bloom, 1965) that classifies the level of thinking skills that students use for effective learning. Bloom's classification has six levels: knowledge, understanding, application, analysis, integration, and evaluation. Each category aims to build one level of abstraction more complex than another. Critical Thinking is a technique for analyzing and assessing thinking to improve it as the referrer's self, self-discipline, self-control, and self-control (Hooks, 2010). Tests are essential for teachers to reaffirm each test given to their students. Then research this answer the following questions: Does the test is given to encourage students in critical thinking according to Bloom's Taxonomy?

## **REVIEW OF LITERATURE**

### ***Definition of Test***

The test can be interpreted as a tool for measuring student skills. In addition, you can use this test to measure whether the learning process corresponds to a determined learning goal. (Arikunto, 2013) states that a test is a set of exercises or other questions to measure knowledge, skill, intelligence, this skill, or the ability of an individual group (Arikunto, 1993). Some of the opinions of non-Arikunt experts on testing, (Brown, 2001), state that testing is a way to measure a person's ability, knowledge, or performance in a particular area. According to (Kubiszyn & Borich, 2006), another definition of the test is just a tool that can make an important contribution to the student's measurement process, curriculum, and pedagogy. In

addition, the definition of the test is commonly translated by FL Goodenough of (Sudijono, 2008). A test can be defined as a task or set of tasks given to an individual or a group of people for the purpose of comparing skills. Give units to pieces of material studied at different times. It can be a device to prove your skills and abilities in learning. There are some functions of the test that must be considered according to (Arikunto, 2013):

1. Function to the class, including raising the level of achievement, diagnosing students` difficulties in learning, and grouping students to do the guiding.
2. Function for the guidance, including providing guidance to students and parents in overcoming students` difficulties in learning.
3. Function for the administration, including for the purposes of the selection of new students, curriculum improvement and learning, as well as the accountability report to the related parties.

### ***Types of Test***

There are nine types of tests, depending on the role. Each test has different features than the other tests.

#### **1. Standardized Test**

Standardized tests are tests that are run, run, and scored in a consistent manner by professional test makers. (Harris, 1969) states that standardized tests are designed for use by thousands and sometimes hundreds of thousands of subjects around the world and are prepared by a team of test specialists. Standardized testing has several features. According to (Arikunto, 2013), standardized tests are national tests based on content and general validity and relate to general knowledge and skills. It was developed by test task professors, reviewers, and editors. Test objects are tested, analyzed, and revised before they are used for testing. Standardized testing when using Arikunto has four purposes. The first is to compare student performance with individual or group personality,

compare student performance in a group or individual class, compare student performance in multiple schools, and compare student performance for a specific period of time. It is to compare and determine the time (Arikunto, 1993). An example of a standardized test is TOEFL.

## 2. Teacher-Made Test

A teacher-created test is a test run by the teacher in the classroom. The purpose of this test is to measure the student's knowledge of success in achieving the learning objectives of the classroom. According to (Arikunto, 2013), the Teacher Made Test is a test created and run by school teachers, so the effectiveness and reliability of the test cannot be compared to standardized tests. The advantage of this type of test is that the student is familiar with the teacher's task. This gives better results than standardized tests. In this case, the teacher must provide the appropriate test. You only need to provide tests that are used by a particular class, not all classes. (Nurgiyantoro, 2001) stated that this check is at best a rating specialty. College student ratings are best summarized with classmates.

## 3. Proficiency Test

Proficiency check is a check to degree learners' ability in each field, take a look at and additionally language. Proficiency is also an exam to analyze a student's language proficiency associated with a selected task. As for the talented period, they have sufficient linguistic competence for the chosen purpose (Brown, 2001). (Nurgiyantoro, 2001) stated that this check is at best a rating specialty. College student ratings are best summarized with classmates.

## 4. Diagnostic Test

Diagnostic tests are used to assess learner difficulties, knowledge gaps, and lack of skills during the course (Harmer, 2011). Diagnostic tests are tests that help teachers and learners identify problems in their language. In general, the strengths and weaknesses of the learner are identified. Therefore, diagnostic tests usually provide more detailed sub-information about the learner. For example, in a form-oriented phase curriculum, diagnostic tests can provide information about learners'

acquisition of tenses, modal aids, specific articles, relative clauses, and more. According to (Irwing & Hughes, 2018), this test is primarily used to determine what to learn. Then, when teachers know what the problem is, they can do something about it.

#### 5. Aptitude Test

An aptitude test is a flair take a look at is designed to evaluate what someone is able to do or to expect what someone is capable of analyzing or doing given the proper schooling and instruction. It represents someone`s degree of competency to carry out a positive form of task. Students stumble upon quite a few flair assessments at some point of faculty as they reflect on consideration on what they could want to have a look at in university or do as a career. These assessments can every now and then provide a widespread concept of what may hobby college students as a destiny career.

#### 6. Subjective Test

A subjective test is a test that enables students to demonstrate their ability to discover knowledge by analyzing and evaluating newly presented information. This test is also run as an essay, as the subjective test gives students the freedom to organize and formulate their answers. (Djiwandono, 2011) argues that subjective tests are tests in which the results of the test can vary from the score to score (Djiwandono, 2011). In other words, scoring depends on the teacher's perception of the answer.

#### 7. Objective Test

An objective test is a test that has correct or incorrect answers and can be evaluated objectively. The objective test is a test of all the information needed to answer the test. The following explanation is related to some of the strengths of the objective test.

- A. This allows teachers to work better on the tested material than on the essay test.
- B. It allows a person to have the correct answer.

- C. The answer matches only the specified answer key and can be easily modified.
- D. The results of the objective test are reliable because they are objectively evaluated in such articles. (Nurgiyantoro, 2001).

### ***Critical Thinking***

Thinking is an herbal manner this is tied to the cognitive manner. An indicator of important wondering capacity is to suppose cautiously approximately a selected topic, ask questions, and discover applicable information. The cognitive manner bureaucracy an intellectual interest to advantage information and important wondering from students. The capacity to suppose seriously makes feel with inside the gaining knowledge of the manner of the social sciences. Critical wondering is one in all many styles of wondering. Critical wondering is beneath the manipulate of the left brain, with a focal point at the evaluation and improvement of the numerous opportunities of the troubles that arise. (Bailin, 1999) concludes that educators usually understand at least three characteristics of critical thinking, given the modes of thinking that educators label non-critical thinking and the modes of critical thinking. Claims to be able. Decide what to believe and what to do. Those engaged in thinking try to meet the appropriate criteria of validity and accuracy.

The thinking meets the relevant criteria up to a certain threshold. Critical Thinking: Critical thinking can be defined as a thinking process that goes deep into analysis and evaluation. According to (Ennis, 1962): Critical thinking means thinking reasonably and reflexively, with an emphasis on deciding what to believe and what to do. According to (Brookhart, 2010), critical thinking is "clever thinking", including logical thinking, question and exploration, observation and explanation, comparison and association, the discovery of complexity, and perspective review.

### ***Bloom Taxonomy***

There are six ranges of cognitive getting to know in keeping with the revised model of Bloom`s Taxonomy. Each degree is conceptually different. The six ranges are remembering, understanding, applying, studying, evaluating, and creating. Bloom`s Taxonomy and Critical Thinking cross hand in hand. Bloom's taxonomy takes college students via a notion system of studying facts or expertise critically. Bloom's type starts with expertise/reminiscence and slowly encourages college students to search for extra facts primarily based totally on a chain of questions and key phrases that generate their behavior. Education and metacognition require each crucial wondering and Bloom's type.

### ***Higher-Order Thinking***

Higher-Order Thinking Skill (HOTS) is a concept of educational reform based on learning classification methods such as the Bloom classification method. It is also related to critical thinking and problem-solving skills. HOTS can be used to place tasks and questions in your tests. Higher-level questions are questions that require students to manipulate information using a higher level of thinking (analysis, integration, evaluation) (Mrah, 2017). Higher Thinking Ability (HOTS) is a three-step cognitive process from Bloom's taxonomy by (Anderson & Krathwohl, 2001).

These are analysis, evaluation, and creation. These skills are especially important for learners because they need to practice thinking critically, logically, and creatively to generate ideas for complex problems. Higher thinking skills are not only important for getting an education, but also for surviving life (William, 2003). Similarly, (King, Goodson, & Rohani, 2004) improve high-level thinking skills (HOTS) when people have unknown problems, uncertainties, or new phenomena. Defined



as consistent, reflexive, metacognitive, and creative critical thinking skills. It brings a solution that never existed before.

## **RESEARCH METHOD**

This study by quantitative study. According to (Sugiyono, 2014), the quantitative survey method can be interpreted as a survey method using a specific sample. A source of data from the final exam, including five test categories (multiple-choice test, complimentary test, essay, authenticity, matching). The purpose of this study is to understand the critical thinking of students in the final exam. The school final exam is the "Anugrah" Tondano Grade 7 Middle School English Final Exam". This study used data from questions found on final exams.

Data is collected in any category of tests or questions to determine and measure critical thinking in the final exam. The first option is to take the existing data from the final inspection, collect the Bloom classification later in the analysis, classify it into 6 categories and interpret it.

In this study, final exam data was collected to answer the questions. Primary data from the tests under investigation were recorded by descriptive analysis. The descriptive analysis included the classification of all activities into three categories of cognitive levels in Bloom's taxonomy, the calculation of frequency, and the display of percentages of each level of thinking. The formula used is:

$$\text{Score \%} = \frac{\text{Type of questions}}{\text{Total number of questions}}$$

## **FINDINGS AND DISCUSSION**

This survey uses data from 7th-grade junior high school English exam questions. There are five types of questions: multiple-choice, matching,

complementation, truth, and essay. The number of questions will be 40, depending on the type of question. That is 10 multiple choices, 5 complements, 10 matches, 10 correctness, and 5 essays. Researchers derived data from an available data source consisting of 40 questions that are analyzed, categorized into six levels of Bloom classification, and interpreted.

Forty the range of questions is the statistics taken then after that the questions are categorized into six Bloom Taxonomy ranges. The statistics are adjusted to the Bloom recognized six ranges inside the cognitive area. Every verb in a query is adjusted in step with cognitive area and desk of verbs Bloom Taxonomy to make it simpler for researchers to categorize statistics. To categorize current statistics, it makes the desk in step with the consequences which have been received from forty contents of the query.

Based on the common components that have been cited inside the preceding chapter, then take the statistics of forty contents of the query for evaluation according to the desk of verbs from Bloom`s Taxonomy. After the evaluation is then classified into six ranges and is made inside the shape of a desk.

The calculation consequences received via way of means of the evaluation there are forty questions and all quiet on the extent of knowledge. The Data is calculated with the assist of the desk are received to examine the verb at the contents of the query. Therefore, based on the formula above then obtained the following results:

$$\frac{40}{40} \times 100 = 100\%$$

Here's the data classified:

Thinking Skills	Questions	Percentage
-----------------	-----------	------------

Knowledge	40	100%
Comprehension		
Application		
Analysis		
Synthesis		
Evaluation		
Total	40	100%

From this, it can be concluded that the researchers found that of the 40 questions, all of them were at the first level of thinking skills according to Bloom's classification theory. The 40 existing questions only address average knowledge. Here are some of the questions from the data and how to analyze them:

A. Multiple Choice

***Choose one of the best answers!***

1. Which one of the following expressions is regarded as a greeting?
  - a. Thank you
  - b. I'm fine, thanks
  - c. Good morning
  - d. Goodbyes

To facilitate analysis and display of results, researchers underline each word they look up. Based on Bloom's classification theorem, you can analyze the verbs in each of the above questions. Some of the examples given are the direction of the text and the question "Which one to choose". The context asked about these multiple-choice questions is available below without providing students with critical thinking training to find answers that cannot be obtained solely from the answers provided in the question.

The following question also shows that they have no problem improving their thinking skills, they only encourage them to remember and think about their daily activities. The above questions did not encourage students to explain, classify, or analyze the text before answering the question.

***Read the dialog carefully to answer no 4-7***

Mr. Kardi, the biology teacher is going to the laboratory, meets Wahyu at break time.

Wahyu : Good morning, sir

Mr. Kardi : Good morning Wahyu, why are you in hurry?

Wahyu : I am going to the library, sir. I want to borrow some books to read.

Mr. Kardi : Great, how diligent you are!

Wahyu : Thank you, sir. Sorry, I must go now. See you

Mr. Kardi : See you.

4. Where does the dialog take place?
  - a. In the library
  - b. In the laboratory
  - c. In the canteen
  - d. At school
  
5. When do you think the dialog happen?
  - a. In the afternoon
  - b. In the evening
  - c. In the morning
  - d. In the night

From these questions, the researcher can conclude that the questions with “wh-questions” such as what, where, when, etc. is the knowledge level. It is proven by Bloom’s Taxonomy.

6. Indra: Why are you holding your stomach? What’s the matter, Indah?

Indah: I have a..... I ate too many chilies.

- a. Toothache
- b. Headache
- c. Backache
- d. Stomach-ache

B. Complete the paragraph below with the correct words!

My name is Andar. I live at Jl. Benteng No. 20 Sukabumi. I have a big house. It's painted blue. There are two lamps, a sofa and a carpet in the.....(11). There is a blanket, pillow, and bolster in the.....(12). We have breakfast every morning in the.....(13). My mother is very kind. She always makes delicious food for me. My mother cooks in the.....(14). My father is a policeman. He drives his car to his office every day and my father puts his car in the.....(15). We love my house very much.

- 11. There are two lamps, a sofa and a carpet in the.....
- 12. There are blanket, pillow, and bolster in the.....
- 13. We have breakfast every morning in the.....

Existing questions only encourage students to remember every object that is around. They are not encouraged to manage everything around them to then develop them into ideas and complete the next sentence with their own answers or sentences. Questions of this type are encountered at the comprehension level. In

other questions, it can also encourage students to know another instance of where such as an example question at the application level.

### C. Essay

***Read the text below and answer the questions!***

Mrs. Julie

Mrs. Julie is my aunt. She is an English teacher at SMPN Sukabumi. She is 35 years old. She is tall and beautiful. She has round eyes and a pointed nose. She has straight hair. Her hair is fairly black. She has white skin. She is very smart. She is also very diligent and patient. She is never angry with her student. She is a kind teacher and we love her very much.

The text is for numbers 36-40

36. What is Mrs. Julie?
37. How old is she?
38. How does her nose look like?
39. Is she beautiful?
40. What is the color of her skin?

All of the above questions are a type of knowledge level question. In this type of essay test, students answer questions only using the stories provided. The result of the classification was 100% knowledge, that is, the 40 questions in the final exam were about lower thinking skills. From this, it can be concluded that the content of all questions does not stimulate the student's critical thinking.

## **CONCLUSION**

The end result of this has a look indicates that the overall variety of questions encompasses lower-better order wondering abilities. After being analyzed primarily

based totally on the idea of bloom taxonomy, all of the contents of the questions include 100% knowledge.

In forty questions there may be no comprehension, application, analysis, synthesis, or maybe evaluation. Some questions best have verbs that inspire college students to bear in mind, arrange and become aware of solutions that can be already be had on questions and stories.

Students aren't recommended to apply crucial wondering wherein they must use their very own expertise to see, study and show their solutions. The questions given make their manner of wondering does now no longer increase and best relies upon the solutions which have been furnished with inside the questions. In the excessive order wondering stage category, college students are predicted on the way to examine and now no longer best read, bear in mind and pick out the to be had solutions.

The 2013 curriculum used right now additionally emphasized Critical Thinking. Hence, in reality in college, there are nonetheless many consequences that get that mastering and checks given to have a low standard. Students who acquire mastering after which offer checks to degree their abilities, it additionally does now no longer reach making them crucial wondering, each in phrases of mastering or each takes a look at given isn't stacked with requirements which can degree crucial considering college students. Critical wondering abilities are very necessary, now no longer best with inside the global of schooling however additionally in ordinary life. Students are predicted while graduating to be capable of practicing their crucial manner of wondering with diverse troubles around. In English mastering is likewise vital to assume significantly thinking about English isn't a mom's tongue or as an overseas language in Indonesia. This now no longer best calls for remembering or

spotting however additionally interprets and calls for creativity to use talking and wondering abilities.

## REFERENCES

- Anderson, L. W. & Krathwohl, D. R. (Eds.) (2001). *A Taxonomy for Learning, Teaching, and Assessing: A Revision of Bloom's Taxonomy of Educational Objectives*. New York: Addison Wesley Longman, Inc.
- Arifin, Z. (2016). Pengaruh Model Quantum Learning disertai Metode Eksperimen terhadap Hasil Belajar Fisika Siswa di SMA Negeri Kalisat. *Jurnal Pembelajaran Fisika*, 4(4), 365-370.
- Arikunto, S. (1993). *Dasar-Dasar Evaluasi Pendidikan*. Jakarta: Bumi Aksara.
- Arikunto, S. (2013). *Prosedur Penelitian: Suatu Pendekatan Praktik*. Jakarta: Rineka Cipta.
- Bailin, S. (1999). Conceptualizing Critical Thinking. *Journal of Curriculum Studies*, 31(3), 285-302.
- Bambulu, D. O., Pelenkahu, N., & Sanger, M. (2021). The Effectiveness of Task-Based Language Teaching in Teaching Writing. *Journal of English Culture, Language, Literature and Education*, 9(1), 44-57.
- Bloom, B. S. (1965). *Taxonomy of Educational Objectives: The classification of Educational Goals*. New York: David McKay Company.
- Brookhart, S. M. (2010). *How to Assess Higher-Order Thinking Skills in Your Classroom*. United States of America: ASCD Member Book.
- Brown, H. D. (2001). *Teaching by Principle: An Interactive Approach to Language Pedagogy*. San Francisco State University: Longman, Inc.
- Cangelosi, J. S. (1995). *Merancang Tes Untuk Menilai Prestasi Siswa*. Bandung: IT.
- Djiwandono, S. (2011). *Tes Bahasa Pegangan Bagi Pengajar Bahasa*. Jakarta: PT Indeks.



- Delatu, Wowor, & Kamagi (2020). Increasing Students' Vocabulary by Using Mind Mapping Technique at SMP N 2 Bitung. *Journal of English culture, Language, Literature and Education*, 8(2) 88-96.
- Ennis, R. H. (1962). *A Concept of Critical Thinking*. Harvard Educational Review, 32(1), 81-111.
- Hampp, P. L. (2019). Use of in teaching acting Simple to be and Past Tense Teaching. *Journal of English Language and Literature Teaching*, 4(1).
- Harmer, J. (2011). *The Practice of English Language Teaching*. New York: Longman.
- Harris, D. P. (1969). *A Comprehensive English Language Test for Speakers of English as a Second Language*. New York: McGraw-Hill.
- Heaton, J. B. (1988). *Writing English Language Tests*. New York: Longman Group.
- Hooks, B. (2010). *Teaching Critical Thinking: Practical Wisdom*. New York: Routledge.
- Irwing, P. & Hughes, D. (2018). *Test Development*. In P. Irwing, T. Booth, & D. J. Hughes (Eds.). *The Wiley Handbook of Psychometric Testing: A Multidisciplinary Reference on Survey, Scale and Test Development*. John Wiley & Sons Ltd.
- King, F. J., Goodson, L., & Rohani, F. (2004). *Higher-Order Thinking Skill. A Publication of the Educational Services Program, now known as the Center for Advancement of Learning and Assessment*. New York: Routledge.
- Kubiszyn, T. & Borich, G. (2006). *Educational Testing and Measurement: Classroom Application and Practice* (8th Edition). New York: Wiley.
- Lambe, L. (2017). Teaching Reading Comprehension In EFL Classroom: A Glance At Some Approaches And Activities. *JELLT*, 2(2).
- Mogea, T. (2019). The Effectiveness of Question and Answer Technique in Teaching Reading Comprehension at SMP Negeri 3 Ratahan. *Journal of Educational Method and Technology Vol. 2 No.2*.
- Mrah, I. (2017). Developing Higher Order Thinking Skills: Towards a Rethinking of EFL Course Books in Moroccan High Schools. *Journal of English Language Teaching and Linguistics*, 2(3), 225-243.

- Nurgiyantoro, B. (2001). *Penilaian dalam Pengajaran Bahasa dan Sastra*. Yogyakarta: BPFY Yogyakarta.
- Sudijono, A. (2008). *Pengantar Evaluasi Pendidikan*. Jakarta: PT Raja Grafindo Persada.
- Sudijono, A. (2011). *Pengantar Evaluasi Pendidikan*. Jakarta: Rajawali Pers.
- Sugiyono, P. (2014). *Metode Penelitian Pendidikan Pendekatan Kuantitatif, Kualitatif, dan R&D*. Bandung: Alfabeta.
- Tahrin, A., Wowor, D. J, & Liando, N. V., (2018). Increasing Students' Vocabulary through Mind Mapping Technique in Developing Students' Vocabulary Mastery at SMP Negeri 1 Remboken. *Kompetensi Jurnal Ilmiah Bahasa dan Seni Vol. 5 No. 2*.
- William, R. B. (2003). *Higher Order Thinking Skills: Challenging All Students to Achieve*. California: Corwin Press.