THE EFFECTIVENESS OF TEAM-BASED LEARNING ON STUDENTS CRITICAL THINKING SKILLS IN THE EFL CLASSROOM

Ananda Pratiwi Bahar¹, Ummi Khaerati Syam², Ilmiah³

1,2,3 Pendidikan Bahasa Inggris FKIP Universitas Muhammadiyah Makassar

1 anandapratiwib@bg.unismuhmakassar.ac.id, 2 ummikhaeratisyam@unismuh.ac.id

3 Ilmiah@fkip.unismuhmakassar.ac.id

ABSTRACT

This research aims to determine how is the effectiveness of Team Based Learning on student critical thinking skills in Efl classroom. This research used quantitative design method with pre-experimental class. The population of this research was taken from the students at the twelve grade of SMA Muhammadiyah Limbung. This population consisted of 125 students in consisted fifth classes. The researcher used purposive sampling technique to choose one class that consisted 22 students as the sample. The result of the students critical thinking skill in mean score in the pre-test (40.68), meanwhile the result of the students critical thinking skill mean score in the post-test (70.05). It was significant different score. The significance score showed between pre-test and post-test (27.364) The table shows Sig. (2-tailed) is 000, which is less than 0.005. A considerable difference was seen between pupils' pre-test and post-test results. As a result, hypothesis Ho was rejected and H1 accepted. It may be said that use of Team-based learning was affective on student critical thinking skill at SMA Muhammadiyah Limbung.

Keywords: Critical Thinking Skills, English, Languange Testing Teaching Methodology, Team-Based Learning, EFL Classroom.

ABSTRAK

Penelitian ini bertujuan untuk menentukan seberapa efektif Pembelajaran Berbasis Tim terhadap keterampilan berpikir kritis siswa di kelas EFL. Penelitian ini menggunakan metode desain kuantitatif dengan kelas pra-eksperimental. Populasi penelitian ini diambil dari siswa kelas dua belas SMA Muhammadiyah Limbung. Populasi ini terdiri dari 125 siswa yang terbagi dalam lima kelas. Peneliti menggunakan teknik purposive sampling untuk memilih satu kelas yang terdiri dari 22 siswa sebagai sampel. Hasil keterampilan berpikir kritis siswa pada skor rata-rata di pre-test (40.68), sementara hasil skor rata-rata keterampilan berpikir kritis siswa di post-test (70.05). Terdapat perbedaan skor yang signifikan. Skor signifikansi menunjukkan antara pre-test dan post-test (27.364). Tabel menunjukkan Sig. (2-tailed) adalah 000, yang kurang dari 0,005. Perbedaan yang signifikan terlihat antara hasil pre-test dan post-test siswa. Sebagai hasilnya, hipotesis Ho ditolak dan H1 diterima. Dapat dikatakan bahwa penggunaan pembelajaran berbasis tim berpengaruh terhadap keterampilan berpikir kritis siswa di SMA Muhammadiyah Limbung.

Kata Kunci: Keterampilan Berpikir Kritis, Bahasa Inggris, Pengujian Bahasa, Metodologi Pengajaran, Pembelajaran Berbasis Tim, Kelas EFL.

A. Introduction

There are four major skills to learned in English. They are reading, writing, speaking and listening. In order to facilitate communication and easy transmission and reception of the information, these four English skills

need to be developed and mastered. However, before focusing on mastering all those skills, one thing that has to be regarded is mastering of thinking skills.

Thinking abilities are the mental, cognitive, and strategic processes that

are employed to solve problems and help students develop their critical thinking abilities. Theorizing, forecasting, assessing, recalling details from memory, and organizing thoughts are examples of thinking skills. Although they are a common possession, not everyone is adept at using them. It takes time to acquire efficient thinking abilities. People use them to process information, plan events, solve problems, and make decisions.

According to Drew, C (2023) Convergent or analytical thinking, divergent thinking, critical thinking, and creative thinking are the four categories of "thinking skills." These abilities enable in problem-solving, critical thinking, understanding the world around ourselves. rational decision-making, and the formation of our own values and views. The ability to think critically allows everyone to digest information, remember details, and apply knowledge to different contexts. More complex problemsolving and analysis may be involved, both of which are beneficial in the classroom.

B. Research Method

Researcher used quantitative research in this study. Researcher

conducted quantitative method.

Quantitative research used objective measurement to gather the numerical data needed to test the hypothesis.

This research used a preexperimental design.

E =0^1 X 0^2

Where:

E = Experiment.

O1 = Pre-test.

X = Treatment.

O2 = Post-test.

(Arikunto, 2001)

There were two Variables in this study, namely dependent variable and independent variable, those are :

In this research the independent variable is Team-Based Learning

Dependent variable in this research is students critical thinking skills in the efl classroom. The population of the research was the Third Grade student's of SMA Muhammadiyah Limbung.

The total number of population consisted of 125 students. In the selection of samples that were taken as research subjects were students of class third grade, there were 5 classrooms, but only one was choose as a sample especially XII MIA 2 of SMA Muhammadiyah Limbung academic year 2024-2025, totalling 22

students. The researcher used a purposive sampling tecnique to take a sample of the population. There were several reasons for taking this class as the sample. The various capacities of pupils might be the first explanation. Teachers of English recommended taking the class to reflect the entire population, given the students' diverse English abilities.

One of the key components of research that influenced the study's outcomes was data collecting, which accomplished the following:

At the first meeting, in order to evaluated students' critical thinking skills abilities before treatment, the researcher gave a pre-test to the students to measure how far. Second. the researcher conducted Team-Learning method Based teaching and learning process and received treatment for four meetings by using of Team-based Learning. Third, after the treatment, a post-test was given to see how well the teambased learned effect on students critical thinking skill. This was done to access the effectiveness of the treatment and determine whether the team-based learning has successfully affected students critical thinking skills. This test included multiple choice and essay test.

In order to assess the students' crtical thinking on student reading comprehension.

1. Criteria, and scoring students essay test.

Table 3.1 Criteria, and scoring students essay test.

No.	Criteria	Score
	The	
1.	meaning and	4
٠.	structure	
	correct.	
	The	
	meaning is	
2.	correct and	3
	some errors of	
	structure.	
	Some errors	
3.	of meaning and	2
	structure.	
	The	
4.	meaning and	1
7.	structure are	'
	incorrect.	
5.	No answer.	0
-	(5)	

(Depdikbud, 2005)

2. Score categorization the students.

Table 3. 2 Score categorization the students

Score interval	Categorization
86-100	Very Good
71-85	Good
56-70	Fair
41-55	Poor
0-40	Very poor

Arikunto S, (2005)

3. After the information was collected, the next research step is to analyze the score pre-test and post-test by using the following procedure:

$$\frac{Score~Obtained}{Score~Maximum} \times Question~Point$$

Mulyana, (2018)

4. Calculating the frequency and percentage of the students' scores.

$$P = \frac{F}{N} \times 100$$

Arikunto S, (2021)

Where:

P = Persentage

F = Frequency respondance

N= amount of data or number of samples

5. Calculate the standard deviation and mean score.

The researcher used the IBM SPSS
Statistic 26 program to compute the
mean and standard deviation of the
students' critical thiking score in

- terms reading comprehension skills.
- To finded out the significance in order to know the null hypothesis is rejected or not by used the IBM SPSS Statistic 26 program.

C.Findings and Discussions Findings

The researcher employed tests, specifically pre- and post-tests, to gather data trial. Prior to treatment, a pre-test was administered determine any prior awareness of the pupils, and а post-test administered following treatment to assess pupils' critical thinking abilities in relation to team-based learning as a method of learning. The critical thinking abilities of the pupils are described as follows, in terms of descriptive and inferential statistical results.

Table4. 1 The Rate Persentage of Students' Score in Pre-Test

Classification	Scores	Frequency	Presentage
Very Good	86-100	-	-
Good	71-85	1	4,5%
Fair	56-70	2	9,1%
Poor	41-55	10	45,4%
Very Poor	0-40	9	40,1%
TOTAL		22	100%

Table 4.1 above showed the rate percentage of students pre-test score based on the table. It was seen that no one students acquired very good score and there was only 1 student 4,

5% who obtained good score. There are only 2 of students 9,1% who obtained fair score, 10 students 4,5% who obtain poor score, and 9 students who obtained very poor score.

The classification score revealed that the students with the lowest score did not comprehend the reading content, while those with the medium score understood the text but struggled to analyze the questions.

Table 4. 2 The Rate Percentage of Students' Score in Post-Test

Classification	Scores	Frequency	Presentage	
Very Good	od 86-100 2		9.1 %	
Good	71-85	12	54.4 %	
Fair	56-70	8	36.6 %	
Poor	41-55	-	-	
Very Poor	0-40	-	-	
TOTAL		22	100%	

Table 4.2 above showed the rate percentage of students post-test score based on the table. There were 2 students 9.1% who obtained very good score 12 of students 54.4% who obtained good score, 8 student 36.6% who obtained fair score, and no one student who obtained very poor and poor items.

The study discovered that students performed well in post-tests due to their understanding of the content and ability to analyze it. Additionally, they were more engaged in their learning process for implementing Team Based Learning.

Despite the researcher found that the difference in post-test scores was discovered because Students were enthusiastic in reading with a team to solve problems together. The students were engaged and asked questions about their understanding of the material, whether from their group or the teacher.

The post-test scores indicated substantial progress in student critical thinking skills, indicating that the teaching process was enjoyable and engaging for the majority of students. As a result, the student's critical thinking skills were affected in the post-test. It suggested that the students' critical thinking skills were successful after being treated using the team-based learning method.

Tabel 4. 3 The Mean Score and Standard Deviation of Pre-Test and Post-Test

Descriptive Statistics					
	N	Minimum	Maximum	Mean	Std. Deviation
pretest	22	26	71	42.68	11.966
postest	22	56	86	70.05	9.089
Valid N (listwise)	22				

Table 4.3 showed above the mean score in pre-test and the students standart deviation in pre-test and post-test. The mean score of the students pre-test is 42.68. It is categorized as poor and the mean score of post test is 70.05. It was categorized as fair. It demonstrates

that there was a bigger difference between the post-test mean score and the pre-test mean score. Additionally, it demonstrated the variation in the mean score before and after the test quite important. The distinction was in the classification from poor to fair.

The standar deviation of the students in pre-test was 11.96 and post test was 9.08 The standard deviation was the standard deviation of the data from its mean value and was calculated as the square root of the variance. A lower standard deviation value indicated a closer value to the average. On the other hand, the values varied more widely the higher the standard deviation value. The result showed that the deviation in post test was lower than pre test.

The researcher used a test of significance in this instance to determine whether or not the null hypothesis was rejected. The t statistical test (Ghozali, 2016) had the following criteria:

If the t-test significance value was greater than 0.05, H_0 was accepted whereas Ha was rejected. This signifies that the independent variable had no influence on the dependent variable.

If the t-test significance value was less than 0.05, then H_0 is rejected and H_0 accepted. This signifies that the independent variable influences the dependent variable

Below was the table displaying the outcome of the paired sample test.

Tabel 4. 4 Significant outcomes of pre-test and post test



The data in Table 4.4 displayed the significant outcomes of pre-test and post-test, with the use of SPSS 26, the analysis indicated that the Sig. (2-tailed) < 0.005. According to the table, the Sig. (2-tailed) value is 0.000 < 0.005. This implies that there was a significant outcome after implementing team-based learning.

Tabel 4. 5 Paired samples correlations

Paired Samples Correlations N Correlation Sig. Pair 1 Pretest & Postest 22 .502 .017

Based on the table showed above with the use of SPSS 26, the analysis indicated that the Sig. (2-tailed) was less than 0.005. According to the table, the Sig. (2-tailed) value was 0.017 < 0.005. This implies that there was a correlations between pretest and post test outcome observed after implementing teambased learning.

Discussion

This research focused to know effectiveness of team-based the learning on students critical thinking skills especially on Reading comprehension skills in terms Inverential comprehension. There were some categories of critical thinking but the researcher focused on critical thinking skills in terms analyzed the information from the text. In this research conducted team-based learning in the treatment to know the affect of student critical thinking.

At the pre-test stage, students experienced difficulties when completing the pre-test due to lack of preparation in answering the test. Some students struggled to recognize specific information and textual meaning in the reading material because students were less active in following the learning and less participated. This was because the researcher has not applied concept of team based learning so that students found it difficult to improve their critical thinking skills. This was in line with the opinion of Odell, (2018) as cited in Nursulistyo E.D, et al (2021) which states that learning using the concept of Team-Based learning can better help

students build their critical thinking skills through conversation and discussion as a method to make knowledge easier to understand.

Student activeness in learning influential building was very in students' critical skills because students collaborated a lot, exchange opinions with other students and be able to solve problems and draw conclusions related to learning material. This was in line with the opinion of Setyawati, (2013) who said that critical thinking is the ability to solve problems with a purpose, analyze and generalize ideas based on facts, and draw logical conclusions with correct arguments. If someone can only solve problems without understanding why the concept is used, then it cannot be said to have critical thinking skills.

The post-test showed а considerable impact on students' critical thinking as they enjoyed the learning process. During investigation, the researcher noted that many students struggled to answer the questions due to lack of interest in reaing the text understanding it was significance.

After implementing Team Based Learning, students became more engaged in the learning process. Team Based Learning provided a collaborative environment where students work together to achieve a common goal. This collaborative environment encouraged active engagement, peer-to-peer learning and teamwork skills, all of which were important for improving critical thinking. This was in line with the opinion of Asri A, et al (2021) which states that students can gain more knowledge about creativity, teamwork, critical thinking, and communication team-based by utilizing learning theory.

Team-Based The used of Learning method encouraged students to analyze the difficulties so that they can complete the test easily. The Team-Based Learning method was used in situations where students must absorb substantial material. answered difficult questions, and solved problems, with the team-based learning method, students were able more enthusiastic in learning because they were given the opportunity to discuss and exchanged opinions with other students. This was in line with the opinion of Dwirahayu G, et al (2018); Nursulistyo E.D, et al (2021) which states that students have more opportunities to collaborate and develop their critical thinking skills to express their personal viewpoints based on books or theories read, analyze the difficulties faced by the team, and solve them.

Based on these results, it can be concluded that the use of teambased learning method was effective in building students' critical thinking skills. This could be seen from the comparison of the pre-test and posttest results which showed that at the pre-test stage students' critical thinking skills were still lacking before applying the Team Based Learning method while at the post-test stage after applying the team based learning method showed a considerable impact on students' critical thinking because they enjoyed the learning process.

D. Conclusion

The researcher concluded based on data analysis, research findings, and previous chapter discussions. Team-based learning enhanced students' critical thinking skills. Team Based Learning improved student critical thinking skills by examining textual content, particularly reading comprehension skills in terms of inverential comprehension at the XII grade MIA 2 students from SMA Muhammadiyah Limbung academic year 2024-2025.

DAFTAR PUSTAKA

- Alatas, F. (2014). Hubungan pemahaman konsep dengan keterampilan berfikir kritis melalui model pembelajaran treffinger pada mata kuliah fisika dasar. EDUSAINS, 6(1), 87-96.
- Alsaleh, N. J. (2020). Teaching Critical Thinking Skills: Literature Review. TOJET: The Turkish Online Journal of Educational Technology, 21-39.
- Altarriba J, R. R. (2018). An Introduction to Bilingualism. New York: Routledge.
- Arif Dimas S.F, Z. A. (2020). Analisis Kemampuan Berpikir Kritis Matematis Pada Model Problem Based Learning (PBL) Berbantu Media Pembelajaran Interaktif dan Google Classroom. Seminar Nasional Pascasarjana, 324-328.
- Arikunto. (2001). Manajemen Penelitian. Jakarta: Rineka Cipta.
- Arikunto, S. (2021). Dasar-dasar Evaluasi Pendidikan. (R. Damayanti, Ed.) Bumi Aksara.
- Bloom, B. E. (1956). Taxonomy of educational objectives: The classification of educational goals. Handbook I:. New York and Toronto: Longmans, Green.

- Brannan L.R, S. H. (2022). Exploring the Effects of Team-Based Learning in a Preservice Reading Methods Course. Education Recourses Information Centers, 16(3).
- Buhungo T. J, Α. Α. (2021).Pengembagan Perangkat Pembelajaran Based Team Pada Learning-Inquiry Pembelajaran Daring Berbantuan WhatsApp Dan Zoom Meeting Pada Materi Gerak Lurus. Jurnal Pendidikan Fisika Dan Teknologi, 7(2), 147-15.
- Burgess, A. W. (2014). Applying established guidelines to teambased learning programs in medical schools: a systematic review. Academic medicine, 89(4), 678.
- Cohen J, R. C. (2017). Enhancing teaching excellence through team-based learning. Innovations in Education and Teaching International, 55(2), 133-142. doi:10.1080/14703297.2017.138 9290
- Cottrell, S. (2005). Critical Thinking Skills, Developing Effective analysis and Argument. New York: Palgrave Macmillan.
- Darby S, H. D. (2023). Improved learning outcomes and teacher experience: A qualitative study of team-based learning in secondary schools. Social Sciences & Humanities Open,

- 8(1). Retrieved from https://doi.org/10.1016/j.ssaho.2 023.100590
- C. E. David Ampuero, (2015).Emphaty and Critical Thinking: Primary Students Solving Local **Environmental Problems Trough** Outdoor Learning, Journal of Education Adventure and Outdoor Learning. 15(1). doi:10.1080/14729679.2013.848 817
- Dayanand, A. K. (2018). Hypothesis
 Types and Research.
 International Journal of Nursing
 Science Practice and Research,
 78-80.
- Depdikbud. (2005). GBPP Pengajaran Bahasa Inggris SLTP. Jakarta: Direktorat Jenderal Pendidikan Pusat.
- Drew, C. (2023, February 17). The 4
 Types of Critical Thinking Skills –
 Explained!. Retrieved from
 Helpful Professor.:
 https://helpfulprofessor.com/thin
 king-skills/
- Efthymiou I.P, a. S. (2023). Team-Based Learning:Enhacing Student Engagement and Learning Outcomes. Researchgate, 2.
- Ennis, R. H. (2011). The Nature of critical Thinking: An Outline of Critical Thinking Dispositions and Abilities. Retrieved from Robert H. Ennis Academic Web Site.

- Evenddy S.S, N. L. (2021). Reading Comprehension Test and Its Challenges In Students' Perspective. Loquen: English Studies Journal, 40-47.
- Gelar Dwirahayu, D. K. (2018, November). Penerapan Team-Based Learning (TBL) untuk Meningkatkan Pemahaman Konsep pada Materi Statistik. Jurnal Pengajaran MIPA UPI, 23, 1-11. doi:10.108269/jpmipa.v23i1.111
- Ghozali, I. (2016). Aplikasi Analisis Multivariete Dengan Program IBM SPSS 23. . Semarang: Badan Penerbit Universitas Diponegoro.
- Grabe, W. (2009). Reading in a Second Language: Moving from Theory to Practice. Cambridge University Press. Retrieved from https://doi.org/10.1017/CBO978 1139150484
- Gunawan, A. (2006). Genius learning strategy. Jakarta: Pustaka Utama.
- Heong, Y. M. (2011). The Level of Morzano Higher Order Thinking Skills Among Technical Education Students. International Journal of Social and Humanity, Vol 1. No. 2, 121-125.
- Hisdon, J. (2010). Learning
 Development Advisor. University
 Plymouth "Critical Thinking",
 Learning Development.
 Retrieved from Plymouth

- University: www.learningdevelopment.ply.m outh.ac.uk.
- Imung, R. (2010). Improving Students'
 Reading Comprehension On
 Narrative Text through Story
 Mapping at the Tenth Grade
 Students of SMAN 5. A Thesis
 Faculty of Teacher Training and
 Education, English Department,
 Jambi University.
- Kareem, N. O. (2021). Using Team-Based Learning in Teaching English to EFL Undergraduate Pilot Students: Α Study Evaluation. Koya University Journal of Humanities and Social Sciences. 4(1), 91-103. doi:10.14500/kujhss.v4n1y2021. pp91-103
- Martutik, P. E. (2020). The Development of a Critical—Creative Reading Assessment Based on Problem Solving. Sage Open, 2158244020923350.
- Michael J, M. &. (2003). Team-based learning enhances long-term retention and critical thinking in an undergraduate microbial physiology course. Journal of Microbiology education Biology Education, 4, 3–12. Retrieved from https://doi.org/10.1128/me.4.1.3 -12.2003
- Michaelsen, L. (2008). Team-based learning Health Professions Education. A Guide to Using Small Groups for Improving Learning. Stylus publishing, LLC.

- Montgomery J.C, T. T. (2019).

 Defining Critical Thinking Across
 Disciplines: An Analysis of
 Community College Faculty
 Perspectives. College Teaching,
 67(3), 169-176.
 doi:10.1080/87567555.2019.157
 9700
- Mulyana, A. (2018, April Wednesday).
 Pendidikan Kewarganegaraan.
 Aktual, Inspiratif, Normatif,
 Aspiratif (AINA). Retrieved from
 Aina Mulyana Blogspot:
 https://ainamulyana.blogspot.co
 m/2018/04/contoh-pemberiannilai-akhir.html?m=1
- Nakano, T. d. (2018). Creativity and innovation: Skills for the 21st Century. Estudos De Psicologia (campinas, 35(3), 237–246. Retrieved from https://doi.org/10.1590/1982-02752018000300002
- Nirwana, A. (2017). Improvong Student Reading Ability Trough Reciprocal Teaching Method. 13.
- Nur Rohmah, G. (2018). Critical Reading: Student Problems, Strategies, and Reflections. Journal of English Language, Literature, and Teaching, 20-24.
- Nursulistyo E.D, S. J. (2021). Model Team-Based Learning dan Model Problem-Based Learning Secara Daring Berpengaruh terhadap Kemampuan Berpikir Kritis Siswa. Jurnal Mimbar Ilmu, 128-137.

- Oliver, R. (2001). Exploring the development of critical thinking skills through a Web-supported problem based learning environment. Teaching and learning online: Pedagogies for new technologies, 98-111.
- Raj T, C. P. (2022). Importance of Critical Thinking in the Education. World Journal of English Language, 13(3), 126-133.
- Rosdiana, R. (2016). An Overview of Critical Reading Strategies to Efl Students. Getsempena English Education Journal, 2(2), 217636.
- Rosmania Rima, Y. Y. (2024).

 Perspektif Kemampuan Berpikir

 Kritis dalam Pembelajaran

 Bahasa Inggris sebagai Bahasa

 Asing. JIIP (Jurnal Ilmiah Ilmu

 Pendidikan), 754-763.
- Safitri N.T, M. (2023, March). EFL Learners' Reading Comprehension Level: What Do They Portray? Scope: Journal of English Language Teaching, 7(2), 247-253.
- Safrianti, R. (2020). Reading Teaching Strategies Used by English Teachers at Senior High School 1 Ampek Angkek. Advances in Social Science, Education and Humanities Research, 353-363.
- Samad A.A, H. H. (2015). Training English Language Pre-service Teachers Using a Team Based Learning Approach. English Language Teaching, 44-51. doi:10.5539/elt.v8n1p44

- Sani, R. A. (2019). Pembelajaran Berbasis HOTS Edisi Revisi: Higher Order Thinking Skills. Tangerang: Tira Smart.
- Sapriya. (2019). Pendidikan IPS konsep dan pembelajaran (D. Effendi, Ed.). Bandung: PT. Remaja Rosdakarya.
- Scanlon, D. M. (2010). Early intervention for reading difficulties: The interactive strategies approach. New York: Guilford Publications.
- Setiyadi, A. G. (2006.). Metode Penelitian untuk Pengajaran Bahasa Asing. Yogyakarta : Graha Ilmu.
- R. Setyawati, D. (2013).Pengembangan Perangkat Pembelajaran Matematika Model Problem Based Learning Enterpreneurship Berorientasi dan Berbantuan CD Interaktif. In Prosiding Seminar Nasional Matematika.
- Thompson, C. ((2011).). Critical thinking across the curriculum: Process over output. International Journal of Humanities and Social Science, 1 (9), 1-7.
- Vries J.D, T. S. (2018). Team-Based Learning: Engaging Learners & Creating Team Accountability. UAS Journal: Journal of Finnish Universities of Applied Sciences.
- Wallace, E. D. (2015). Developing critical thinking skills: Assessing the effectiveness of workbook

exercises. Journal of College Teaching & Learning, 12(2), 101-108.

Zubaidah, S. (2010). Berpikir kritis:
Kemampuan berpikir tingkat
Tinggi Yang dapat
Dikembangkan melalui
Pembelajaran Sains. Makalah
Seminar Nasional Sains dengan
Tema Optimalisasi Sains untuk
memberdayakan Manusia.
Pascasarjana Unesa, (Vol. 16).