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English Students' Critical Thinking Abilities with Learning Activities

Rei Christine Artauli[1], Sari Simbolon[2], Devi Agata Lubis[3], Rotua Theresia[4], Oriza Sativa Ellan[5], Marwa[6]

[1] Universitas Lancang Kuning; reichrst@gmail.com
[2] Universitas Lancang Kuning; sarisimbolon35@gmail.com
[3] Universitas Lancang Kuning; deviagata08@gmail.com
[4] Universitas Lancang Kuning; teresiringo@gmail.com
[5] Universitas Lancang Kuning; sativao110@gmail.com
[6] Universitas Lancang Kuning; marwaaisyah@yahoo.co.id

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ABSTRACT

The goal of this correlation study is to examine how students' critical thinking relates to learning activities. This study investigates "How do students think critically and learn activities in the EFL class?" This quantitative study focused on English students in the Department of Language Education, Faculty of Education, and Vocational Studies. Data were acquired from thirty respondents using two questionnaires: critical thinking and learning activities.Descriptive statistics (mean and standard deviation) were employed to examine student questionnaire results. This study found a substantial association between students' critical thinking and learning activities, as shown by M = (3.67) and M = (3.45). In general, English students' critical thinking during learning activities is classified as "current." In short, English students' critical thinking with learning activities indicates that they applied critical thinking abilities during the learning process. Future studies might look into how students think and behave in critical thinking and classroom learning activities.

Corresponding Author:
Rei Christine Artauli
Universitas Lancang Kuning; reichrst@gmail.com

1. INTRODUCTION

In the 21st century, the world has entered the technological era. Technology has changed the way we live, work and learn. In this digital era, we are faced with various kinds of information coming from various sources, both credible and not. Therefore, critical thinking skills are very important for us to have. Critical thinking is the ability to analyze and provide information in a purposeful manner. This ability can help us to sort out right and wrong information, and make the right decisions. In 21st century, thinking itself is not considered to be an adequate skill and higher level of thinking skills are more emphasized. Improving critical thinking skills of learners should be one of the most prominent objectives of education (Gedik, 2013; Özelçi & Çaliskan, 2019; Ozmen, 2015).

Critical thinking is related to learning activities where the use of media in the learning process can improve students' critical and innovative thinking abilities in student learning.Learning activities are essentially structured tasks or experiences designed to foster the acquisition of knowledge, skills, and attitudes. It involves active engagement with the material and promotes deeper understanding through application and practice.Learning activities are an essential part of an effective educational process because they involve students in the learning process and help them remember information more effectively. Their implementation of learning activities in terms of teaching practice activities and reflection, and on the contextual and institutional conditions of the practical term, e.g. school type and intensity of social support (Clarindo et al., 2020; König & Rothland, 2018; Richter et al., 2013; Zeichner & Tabachnick, 2001).

Critical thinking skills are becoming increasingly important to have, especially in teaching and learning activities which have an impact on critical thinking that occurs in learning activities in the technological era. The first is improving the quality of learning, Learning quality is a measure of how well learning occurs. The quality of learning can be measured from various aspects, such as student learning outcomes, learning processes, and learning environments. There are many factors that can influence the quality of learning, such as curriculum, learning methods, facilities and infrastructure, and human resources. Excellence and values are crucial terms, which need to be taken into consideration to bring about improvements in quality and efficiency of education (Chapman, 2002; Johnes et al., 2017; Kapur, 2019).

The second impact is increasing media literacy. Media literacy is a term used to describe the skills and abilities necessary for conscious and independent development in the new communication environments – digital, global, and multimedia – in the information society (Pérez Tornero, 2008; Tornero, 2008). Media literacy is considered the result of the media education process. Media literacy is also the ability to understand, analyze and use media critically. This ability is important to have in the technological era, where we are flooded with information from various sources, both credible and not. To increase media literacy in the technological era, namely recognizing bias, analyzing sources, comparing information from various sources and evaluating content. By increasing media literacy, we can become more critical and responsible media consumers. We can avoid spreading fake news or hoaxes, and we can use the media for good.

In a technology-driven era, the way we learn and process information is undergoing a significant transformation.Critical thinking is the ability to analyze information, identify bias, evaluate arguments, and form independent conclusions. This is an essential skill for navigating the complexities of the modern world, where information is available but not always reliable.Research on the correlation between technology and critical thinking is ongoing and complex. Some studies suggest that technology can have a positive impact on critical thinking skills, while others highlight its potential drawbacks. Furthermore, optimizing students' critical thinking skills regarding subject matter, use of language, use of logical thinking structures, testing knowledge, and experience of various aspects will enable them to become independent students (Listiana et al., 2016; Mite & Corebima, 2017; Zubaidah et al., 2018).

The reason for researching the relationship between English students' critical thinking skills and learning activities in the technological era is because there are underlying factors, namely the increasing importance of critical thinking in the technological era. Critical thinking is a very important skill in the 21st century, especially in this era of technology. Information overload and the rapid dissemination of information require the ability to critically evaluate information and make informed decisions. Higher education institutions

must prioritize the development of critical thinking skills to prepare students for a digitally driven world.

The second reason addresses potential learning gaps for English students in the third semester: The third semester is often an important period in a student's academic journey, where they move from introductory courses to more specialized subjects. Investigating correlations can help identify whether learning activities at this stage adequately support the development of critical thinking skills necessary for higher-level learning. These findings can inform necessary adjustments to learning activities in the third semester to ensure students have the critical thinking skills necessary to succeed in their chosen fields.

The third reason is the contextualization of the findings. Investigating correlations in the context of these findings provides valuable insights specific to institutional learning environments and student populations. This allows for a tailored approach to enhance learning activities and develop critical thinking skills, taking into account the specific needs and challenges faced by students. The conclusion is that knowing the relationship between students' critical thinking abilities and learning activities in the technological era for third-semester students has significant value for understanding and improving the development of critical thinking in higher education. The insights gained from this research can inform educators, curriculum developers, and education stakeholders about how to create effective learning environments and equip students with skills. Critical thinking is necessary for success in the 21st century.

2. METHODS

This research uses quantitative methods, which methodologically can test to determine the relationship between learning activities in the technological era and students' critical thinking abilities. This research was conducted in December 2023 at the English Language Education Department, Faculty of Teacher Training and Education, one of the universities in Riau. The variables in this research are critical thinking variables and learning model variables through questionnaires/statements. Using convenience sampling, a representative sample of third semester students will be surveyed with a questionnaire that measures these two variables. The number of respondents to both questionnaires was 30 respondents, and used 2 variables, namely critical thinking and learning models. Which consists of 16 statements for critical thinking and 36 statements for learning activities.

Tabel.1 Scores of the students Questionnaire Answers

Answer	Score
Always	5
Often	4
Neutral	3
Sometimes	2
Never	1

Table 2 .Katz & Kahn's Likert Scale Range

No	Range	Category
1.	1.00-2.49	Low
2.	2.50-3.99	Moderate
3.	4.00-5.49	High

The instrument in this research is a questionnaire (adopted by Palmina Rosa, 2021) (Jansen et al., 2019) This instrument has been tested with descriptive statistics (using SPSS) with deductive content analysis. The validity of the instrument was tested through review by subject matter experts. Data will be analyzed using Descriptive Statistics and Pearson Product-Moment Correlation Coefficient to determine and explain the relationship between learning activities and critical thinking skills. This research will contribute valuable insights

in optimizing technology-based learning to improve the development of critical thinking among students.

Table 3 Grouping Correlation Values

Score	Correlation
0.00-0.20	Very Low
0.21-0.40	Low
0.41-0.70	Moderate
0.71-0.90	High
0.91-0.99	Very High
1	Perfect

3. FINDINGS AND DISCUSSION

Findings

3.1 .Critical Thinking

Descriptive Statistics

	N	Sum	Mean	Std. Deviation
Critical thinking	30	110.33	3.6778	.87009
Valid N (listwise)	30			

Note : N = 30 Respondent ,m & std are calculated on a likert scale (1-5)

The table above shows critical learning, which is at the “Moderate" level as indicated by the Mean (M=3.67) and Standard Deviation (Std=.870). The data shows that critical thinking in students is ordinary expressed. This finding shows that critical thinking are commonly in learning.

3.2 Learning Activity

Descriptive Statistics

	N	Sum	Mean	Std. Deviation
Learning Activites	30	103.67	3.4556	.69854
Valid N (listwise)	30			

Note : N = 30 Respondent ,m & std are calculated on a likert scale (1-5)

The learning activities in the table above are at the "Moderate" level, as shown by the mean (M = 3.45) and standard deviation (Std = 6.98). The statistics reveal that students' learning activities are often expressed. This data indicates that learning activities are frequently used in learning.

3.3 Correlation of English Students in Critical Thinking and Learning Activity

Correlations

		Critical Thinking	Learning Activitites
Critical Thinking	Pearson Correlation	1	-.118
	Sig. (2-tailed)		.536
	N	30	30
Learning Activitites	Pearson Correlation	-.118	1
	Sig. (2-tailed)	.536	
	N	30	30

In the table above it can be concluded that there is a relationship between Critical Thinking (X) and Learning Activities (Y).

A. Based on the sig significance value (2-tailed):

Based on the output table above, it is known that the correlation between English students' critical thinking and learning activities is shown in this table. The Pearson correlation coefficient value shown in Table 3.3 is 0.536, which means there is a strong relationship between group learning activities and critical thinking skills. If the significance value is more than 0.05 at the 95% confidence level with a score of 0.536 > 0.349, it means that there is a very large significant relationship.

B. Based on r hitung (Pearson Correlation)

The calculated r value for the relationship between critical thinking (x) and learning activities (y) is -.118 > .536 so it can be concluded that there is a relationship between the critical thinking variable and learning activities. Because the calculated r or Pearson correlation in this analysis is positive, it means that the relationship between critical thinking and learning activities is positive. In other words, the more critical thinking increases, the more learning activities will increase.

Discussion

Critical thinking and English language development have a constant beneficial association, according to research. The outstanding findings (Erdogan, 2019; Warsah et al., 2021; Yang & Chou, 2008) are supported by their research showing a strong and positive relationship between learning activities and critical thinking skills. (Babashamasi et al., 2022; Gandimathi & Zarei, 2018) discovered that pupils who participated in critical thinking activities had better English language abilities. (Hosseini et al., 2012) discovered a substantial positive association between critical thinking skills and reading comprehension among Iranian university students, lending credence to this.

It is crucial for pupils to acquire critical thinking abilities in addition to English language fluency in today's technologically advanced society. Critical thinking skills are essential. In the modern age, critical thinking is a crucial skill for English language learners. Students with this skill may present arguments, spread knowledge, and arrive at well-informed conclusions. (Harizaj & Hajrulla, 2017) highlighted the importance of critical thinking in the development of communication skills, vocabulary, and language usage in a variety of circumstances. (Forbes, 2018), on the other hand, highlighted the difficulty students have in comprehending and displaying critical thinking, implying the need for specific supervision and practice. In (Ennis, 2011); (Facione, 1990) with assistance from prominent scholars in the field, this study attempts to determine whether English students' use of technology in the classroom and their critical thinking skills are related. The ability to think critically is a crucial life skill that is required for success in many aspects of life. Critical thinking abilities are becoming more and more crucial in the internet age as pupils encounter a wide variety of online information and sites. Students who possess critical thinking abilities will be better equipped to handle obstacles in the contemporary environment.

English students' critical thinking abilities can be assessed through various learning activities. One study explored students' ability to develop arguments, supporting details, and problem analysis and solutions [1]. Another study found a positive correlation between learning motivation and critical thinking skills among English language education students [2]. Additionally, a study investigated the relationship between critical thinking ability and learning styles, revealing positive associations with left-brain dominance, ambiguity tolerance, and reflectivity [3]. Blended learning, which combines traditional and online

discussions, was found to enhance students' critical thinking skills in learning English [4]. Lastly, a study focused on EFL students' critical thinking in speaking activities, revealing different levels of critical thinking achievement, including understanding, applying, and evaluating [5]. These studies highlight the importance of incorporating diverse learning activities to foster and assess English students' critical thinking abilities.

Technology's Impact on English Language Learning: Through a variety of educational activities like online forums, role-playing games, and instructional simulations, technology can support students in gaining critical thinking abilities. (Gandimathi & Zarei, 2018; Warschauer, 2006) Numerous studies have demonstrated how using technology can help students become more adept critical thinkers. According to research by (Warsah et al., 2021; Warschauer, 2006) students who employed technology for online discussions demonstrated superior critical thinking abilities compared to their non-technical counterparts, research also revealed that students who learned English through simulations exhibited superior critical thinking abilities compared to those who did not use simulations.Of course, there are proper ways to employ technology to help children develop their critical thinking abilities. Technology selection by teachers must take learning objectives and needs into account. Additionally, educators must create lesson plans that effectively develop students' critical thinking abilities.

(Dong, 2015; Facione, 2000) discovered a substantial association between undergraduates' critical thinking ability and English language competency, implying that language skills influence critical thinking. (Arabloo et al., 2021) backed this up by demonstrating how technology-assisted project-based English learning may improve critical thinking and problem-solving abilities. Yu (2015), on the other hand, emphasized the need for comprehensive and correct conceptual and system understanding in order to effectively apply critical thinking to technical concerns. (Swart, 2017) stated that, when connected with subject-specific knowledge, technology-enhanced learning can aid in the development of critical thinking. These studies demonstrate that technology-assisted learning activities can significantly affect English students' critical thinking abilities, particularly when they are connected with subject-specific information and supported by good language competence.

(Indah et al., 2022) discovered a link between research competency and digital literacy, but not between digital literacy and critical thinking. This is backed further by a link between information and communication technology capabilities and critical thinking in university students (Kreménková et al., 2021). Finally, there are numerous explanations for the findings of this study. To begin, critical thinking abilities are difficult and need time to acquire. As a result, learning activities completed in a short amount of time may be insufficient to have a major influence on students' critical thinking abilities.Second, English language students' learning activities may not be especially targeted to promote critical thinking abilities. These learning exercises may be more focused on topic content or specific language abilities.Third, additional variables such as student characteristics or the learning environment might have an impact on students' critical thinking abilities. As a result, more study is needed to investigate other elements that may impact the association between critical thinking abilities and learning activities.

4. CONCLUSION

Based on the findings of this research, the researcher concluded that there is a relationship between critical thinking and learning activities in the classroom. Because this research is still limited, future researchers can include additional research such as objective measurements or observation methods to provide a more comprehensive picture and objective assessment of the relationship between critical thinking and learning activities. Research can also use other additional methods, such as interviews and observations.

Therefore, in-depth research or qualitative research is very important for critical thinking and learning activities.

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