

The Influence of Using Twitter (X) To Enhance Critical Thinking Skill At Higher Education

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Abstract

This study aims to find out how Twitter can enhance students' critical thinking abilities in higher education, what factors influence it, and what way it is used to see if it improves critical thinking. This study examined the relationship between Twitter and critical thinking using mixed quantitative and qualitative method. This research was conducted in Universitas Muhammadiyah Kalimantan Timur, with the subject being the Twitter users of eighth semester and meet the criteria such as having a Twitter app and an account, using Twitter for more than a year, and have interacting with posts there. While multiple choice tests and questionnaires were used to collect quantitative data, interview was used to gather qualitative data. The results of the research showed that Twitter can help users develop their critical thinking skills with the ease of getting information and being a forum for effective discussion. Twitter is also a social media that is easy to access and has features that really help spread a wider perspective to help the learning process.

Keywords: Critical Thinking, Higher Education, Twitter

Abstrak

Penelitian ini bertujuan untuk mengetahui bagaimana Twitter dapat meningkatkan kemampuan berpikir kritis mahasiswa di jenjang pendidikan tinggi, faktor-faktor apa saja yang mempengaruhinya, dan bagaimana cara penggunaannya untuk melihat apakah Twitter dapat meningkatkan kemampuan berpikir kritis. Penelitian ini mengkaji hubungan antara Twitter dan berpikir kritis dengan menggunakan metode kuantitatif dan kualitatif. Penelitian ini dilakukan di Universitas Muhammadiyah Kalimantan Timur, dengan subjek penelitian adalah pengguna Twitter semester delapan dan memenuhi kriteria seperti memiliki aplikasi dan akun Twitter, menggunakan Twitter lebih dari satu tahun, dan pernah berinteraksi dengan postingan di Twitter. Sementara tes pilihan ganda dan kuesioner digunakan untuk mengumpulkan data kuantitatif, wawancara digunakan untuk mengumpulkan data kualitatif. Hasil penelitian menunjukkan bahwa Twitter dapat membantu pengguna mengembangkan keterampilan berpikir kritis mereka dengan kemudahan mendapatkan informasi dan menjadi forum untuk berdiskusi secara efektif. Twitter juga merupakan media sosial yang mudah diakses dan memiliki fitur-fitur yang sangat membantu menyebarkan perspektif yang lebih luas untuk membantu proses pembelajaran.

Kata Kunci: Berpikir Kritis, Pendidikan Tinggi, Twitter

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INTRODUCTION

Indonesia is currently transitioning into the fourth industrial revolution. Artificial intelligence and the internet of things are two examples of digital systems and technology that are employed as tools to support daily tasks in the fourth industrial revolution, or industrial period 4.0. The phenomenon of education in the Fourth Industrial Revolution Era involves adapting the new curriculum to the demands of the times in order to meet the needs of the revolution. Digital media usage as a source of information is a necessary for college students. (Situmorang et al., 2022).

All facets of our lives have been profoundly impacted by information and communication technologies (ICTs), and education is no exception. The practice of communication and application

skills is dismissed by traditional teaching and learning methods, which are regarded as outdated (Espinoza-Celi et al., 2018). In particular, research has demonstrated that a number of digital technologies have a significant potential to improve students' reading skills (Molster, 2016). Utilizing social media and networks like Facebook, LinkedIn, Flickr, WhatsApp, and Twitter, technology has been applied in the field of education to enhance a variety of language skills (Espinoza-Celi et al., 2018).

Teenagers, particularly students, make up the majority of social media users these days, accounting for over 50% of all users. Furthermore, social media has emerged as a tool for students to learn since it makes it simple for them to locate any course-related information, including general knowledge requirements and curricular materials. This allows them to access trustworthy sources to expand their knowledge. Social media usage in this day and age should benefit students' growth because the range of material shared is directly linked to their intellectual capacity (Mustaqililah et al., 2023).

One effect of the advancement of information and communication technology is the creation of numerous new forms of social media. Right now, Twitter is one of the most widely used social media platforms worldwide and in Indonesia, particularly among students. Twitter is a social media platform that serves as an information channel, providing users with access to information on topics of interest (Aprilizdihar et al., 2022).

Twitter is a useful tool for teaching information and media literacy as well as digital skills. You may educate students to be self-aware, knowledgeable, imaginative, involved, and capable of self-expression. They can also learn how to use social media responsibly and safely, both on Twitter and other platforms (Grizzle, 2018). Twitter can also be focused on improving critical thinking. According to Nimah (2022), there is a relationship between Twitter and critical thinking. Twitter users are able to interpret posts, leave constructive comments and suggestions, and refrain from demeaning other people's posts. As a result, utilizing Twitter to assess students' critical thinking is useful and offers an additional teaching strategy.

Nowadays, it's crucial for students to develop critical thinking abilities so they may become information seekers and critics. Their most effective means of responding to inquiries, addressing issues, settling disputes, and engaging in democratic society are intellectual pursuits and abilities. (Novianti, 2020). However, Stitt (2015) stated that students that lack critical thinking skills struggle to understand difficult subjects, have bad work and study habits, and struggle to write at the required standard.

Critical thinking happens when students apply creative thought to build an argument, solve an issue, or come to a conclusion while also analyzing, evaluating, interpreting, or synthesizing information. Both reasoning and imagination are necessary for critical thinking. In addition to creative, inventive, and sophisticated methods to the resolution of problems and challenges, it may entail inductive and deductive reasoning, analysis, and problem-solving (Iyer, 2019).

On the basis of study result from Sudiran (2019) in university research on Twitter application for learning, students see Twitter's benefits in a positive light. This indicates that there are three things that need to be resolved: first, students have a positive view of Twitter as a tool that helps them communicate more effectively in English. Second, Twitter helps students grow the vocabulary in English that helps them become more proficient readers. Lastly, students think about how using Twitter may help them become better in translation skill. Based on the three concepts mentioned above, it becomes clear why students enrolled in the English Education Program view Twitter positively as a tool for improving their English language proficiency.

In addition, the research from Mustaqililah et al., (2023) showed that it has been demonstrated that using Twitter can help students think more critically. Twitter itself has a significant impact on its users' access to all information, and it also has a significant impact on students' tendency to be skeptical of sources of information and issues. The purpose of this study is to examine the association between critical thinking a trait that may be related to Twitter and the platform as a medium.

METHOD

This study employed both quantitative and qualitative research methods. The aim was to examine the relationship between critical thinking a trait potentially associated with Twitter and the platform as a medium. The research focused on a group of students from Universitas Muhammadiyah Kalimantan Timur (UMKT), specifically those in the eighth semester of the English Department. Participants were selected based on the following criteria: they use Twitter, they have a Twitter account, and they have been using Twitter for over a year, actively reading and responding to posts. The researcher used tests, questionnaires, and interviews as data collection methods. The first instrument was a test, where the researcher asked multiple-choice questions after displaying several news or information-related posts and tweets. Data analysis was used to evaluate the outcomes of the questionnaires and interviews. During the data collection process, the researcher gathered all information from the questionnaires and interview findings, presenting the data in tables and narrative text. Finally, conclusions were drawn based on the theoretical framework, supported by specific data and information from the questionnaire and interview analysis, and the researcher described the study's results.

RESULT AND DISCUSSION

Data was collected from 8th semester students in the English department at UMKT through questionnaires and interviews. Twenty items about critical thinking abilities were included in the questionnaire for respondents. Five people took part in the interview session, out of the twenty respondents that completed the online questionnaire. There were seven questions asked in the interview session which aimed to explore a deeper perspective on the benefits of using Twitter for

critical thinking.

Questionnaires

Below is a table of results from student's perceptions about the Twitter usage for critical thinking obtained from a questionnaire that was distributed to students who use Twitter. The questionnaire used in this study was taken from Kobylarek et al., (2022). Regarding the Likert format used in the questionnaire, statements were set at a five-point scale ranging from "strongly agree" (SA) to "strongly disagree" (SD).

Table1. Questionnaire Result

No	Statements	Strongly Agree	Agree	Undecided	Disagree	Strongly Disagree
1	I enjoy combining information from many texts.	30%	35%	25%	10%	0%
2	I'm willing to share the recently acquired knowledge.	15%	50%	15%	20%	0%
3	Extensive examinations of reality are a waste of time.	10%	25%	15%	40%	10%
4	I can repeat key themes from the text now that I have read it.	10%	30%	35%	20%	5%
5	There are numerous methods to express the same idea.	25%	40%	25%	10%	0%
6	I base my opinion on a variety of facts that I integrate with one another.	5%	65%	15%	5%	10%
7	When I speak, I use a lot of examples.	15%	50%	15%	20%	0%
8	During the conversation, my priorities are understanding the other side and supporting my position.	5%	45%	30%	15%	5%
9	I enjoy identifying connections between seemingly unrelated occurrences.	10%	45%	25%	20%	0%
10	I am able to view the text's structure and make changes to it.	0%	35%	35%	30%	0%
11	When I speak, I strive to support my positions with real-world examples.	10%	55%	15%	15%	5%
12	When I find something interesting, I strive to verify if it is true.	35%	30%	10%	15%	10%
13	In order to assess the data, I check numerous sources.	30%	45%	10%	15%	0%
14	I do not recall much of what I	10%	25%	30%	30%	5%

	was taught in school.					
15	I enjoy debating new interpretations of texts that I am already familiar with.	15%	50%	15%	15%	5%
16	I enjoy compiling many viewpoints and contrasting them with one another.	20%	5%	15%	10%	10%
17	It is hard for me to paraphrase.	10%	15%	40%	30%	5%
18	I make an effort to apply the knowledge I have gained to my daily life.	20%	35%	20%	15%	10%
19	I am looking for connections between the information in the text and other texts I have read as I read it.	20%	35%	10%	30%	5%
20	I consider the statements' backgrounds, undertones, and complexities.	20%	45%	20%	10%	5%

According to the data above, it can be concluded that practically all respondents have used a variety of critical thinking techniques in their life. Due to the abundance of information available on social media, the majority of them are able to compile different texts they have read and even share them with others, which can be the start of a discussion. They can express and create new perceptions from various information, both from information they have developed themselves and also from other people's perspectives. The data shows that most of them admit that they use practical examples and also check various other sources to emphasize their stance. Moreover, more than half of them were still unsure about their capacity for critical thinking and paraphrasing information in everyday situations. The respondents also agree that they truly consider the context, nuances, and overtones in any information.

Of the respondents, 35% agree and 30% strongly agree that they enjoy compiling information from one text to another. However, 10% of respondents said they did not agree with that. 50% of them agree that sharing the newly gained information would be beneficial, while 20% of them rather to keep the information to themselves. A total of 40% of respondents agreed that the same idea can be expressed in numerous ways, but 10% of them believe that there are no many methods to express the same thing. In response to the sixth statement, which asks respondents if they base their opinion on a variety of facts that they integrate with one another, 65% of respondents said they agreed, while only 10% strongly disagreed. About 55% of students agreed that they try to use practical example to support their positions while discussing. However, 15% more did not use any real-world example. In line with another statement in point 8, they also try to understand other parties at the same time. There are 45% of respondents who agree that they check numerous sources to assess the data, while the other 15% tend to only read from one source. And in one of the statements, while 15% of respondents are more against discussing information with others, the majority—50% of respondents—enjoys

talking about new interpretations in texts they already know. 45% of respondents stated that they agreed and did consider the statements' backgrounds, undertones, and complexities, but there were 10% who disagreed and did not pay attention to the context, tone and feel of any statement they read.

Interviews

This interview discusses how people view Twitter usage for academic purposes and how using the platform to enhance critical thinking influences respondents' opinions. The results of the interviews explain how they analyze and respond to various information on Twitter, how they discuss, whether Twitter has the potential to improve critical thinking and whether they can apply it in real life, according to the answers provided by respondents.

The categorization in this study is divided into six different indicators. The first indicator is analyzing. Analyzing in using Twitter referring to how they analyze a text or information they have read on Twitter. Here are some quotes from the answers:

"When I read an information, especially on Twitter, I try to connect the text and the information that I already know. I just connected the dot, is it true, or is it related to the information that I saw before and the information that I recently read on Twitter." (P2)

According to the responses given above, participants generally analyze texts by making connections between them, regardless of how real or relevant the connections are, when reading one text.

"If the two texts I read are related, I look for the connection, try to find out more deeply."

"...usually, Twitter is faster than other platforms, and it is also easy to find out via Twitter if it is hoax or not." (P5).

The participants expressed a desire to learn more in-depth information as well, and noted that knowledge was easily obtained on Twitter due to its quick accessibility and ease of spotting fake content.

Indicator number two is evaluating. Assessing requires determining if the data collected is accurate or not. Some examples that strengthen this indicator include:

"Yes, for sure. I checked the comments, and if, for example, we looked a few hours after the post was posted, there would definitely be another point of view." (P3).

"Of course. because we are trying to against hoaxes, so checking the information whether it is true or not is very important." (P5).

Participants expressed agreement that they always verify the information they learn, whether from the post itself or via other user comments. Verifying information also helps in preventing hoaxes, therefore evaluation is a crucial thing to do.

Furthermore, the third indicator creating illustrates that one way to interact on Twitter is through discussion, which in turn can result in the creation of a new viewpoint or interpretation of a text. To supports this indicator, consider the following excerpts:

"Yes, usually I discuss it, especially if the topic or sentence is new, I immediately tell people. like, oh this turns out to mean this, oh it turns out that from this topic we get another perspective, oh it turns out that this information is different from the previous information,

and many more. That opens up new perspectives, especially on Twitter, there are lots of replies from other people, so there are lots of other point of views that gives new information.” (P2)

“If I find a new word on Twitter, I often use it. I often ask my friends too, but when I find new sentence, it is mostly on Twitter.” (P5)

The participants concurred that they frequently had discussions with others. From the results of this discussion, they can find lots of new meanings from the texts they have read. Since there are so many different types of people on Twitter, each with their own unique perspective that can lead to new information, new perspectives can emerge quickly. However, they also gain from this since they can learn a lot of new sentences.

The next indicator, remembering, helps in determining the ease with which significant information may be recalled following reading a text. Examples of this indicator's use are as follows:

” Yes, I can. For example, if I read a text, it must be a topic that I like, so I can get the outline or essence of the topic. So, no need to read it again.” (P3).

It explains that it is simpler to understand and retain the main idea of a topic if you find it to be intriguing and well-liked.

“I can get the points straight away. Just read and understand it, because I rarely read long-winded ones either. It is more difficult if you get a thread that is ongoing or continuing, so it takes a long time before you get the points.” (P4).

However, participants believed that it would be more difficult to recall the main points of a text if it was excessively long, still on going, or even continuing. It takes longer to understand the content of the text.

Furthermore, the fifth indicator about understanding finds out whether they frequently collect different viewpoints and compare them as material for deeper thinking. Regarding this, the participants stated that:

“Oh yes, I often do that. because I can position myself as a reader of each netizen's point of view.” (P1).

This statement indicates that participants typically gather viewpoints from other individuals and present themselves as listeners of various perspectives from netizens.

“I like to share exciting topics with my friends and then discuss them like, "what do you think?" Just compare, there is no end, but we can get many perspectives on this topic.” (P2).

“Oh yes, because on Twitter people are critical. Many opinions differ from one another or contradict each other. Well, I like to take it, then sort it out, which one is suitable.” (P4).

It is implied by participants that they often compare one opinion with another through discussing or by reading comments left by other users. In this way, they open up to several fresh viewpoints that align with their preferences. Another statement made was that we can learn a lot about perspectives we were unaware of before by examining the numerous critical viewpoints on Twitter.

Applying is the final indicator. Focuses on using what is learnt on Twitter in real life and whether the application may be a helpful tool for enhancing critical thinking, according to this indicator. These are some opinions from the findings of the interview:

"I did. For example, if we find a useful thread on Twitter, it can sometimes be applied in everyday life. Because Twitter has now become our daily life, it will be easier to remember later." (P2).

Participants emphasized that they had learned a lot of practical tips from different Twitter threads that they might implement in their daily lives. Meanwhile, the benefits of Twitter for academic purposes are supported by various statements, such as:

"Yes, it is very possible. Twitter can improve our critical thinking, because there is a lot of information, and we also discuss together in the comments, so there are a lot of combined thoughts from netizens here." (P1).

"I think yes, Twitter is useful for us to improve our critical thinking. Twitter is a great forum for discussion and can interact with many people. We can get a lot of insight, and it is easy to access too." (P2).

"Many people use Twitter, because there are lots of people from various walks of life, so there are lots of new POVs too." (P3).

"Yes, on Twitter we can also learn writing. Twitter is global, right, so we can meet a lot of mutual friends from abroad, so there is a lot we can learn." (P4).

"Of course. If you compare Twitter and Instagram, Twitter is more about writing than photos. So, it is easier to find information on Twitter, because its features also make it easy to share links or journals." (P5).

All participants agreed that using Twitter can improve critical thinking, with various factors according to their respective opinions. The most frequent reason is that Twitter is an excellent platform for knowledge sharing due to the large number of people from diverse backgrounds who offer fresh viewpoints. Twitter provides options that make it simple for users to share journals and other reading materials, with a homepage that shows content with high interaction, this makes knowledge easily accessible. In addition, five of the five responders had been using Twitter for longer than three years. This explains why they are very conversant with the Twitter app, and it is possible that their extended usage of the platform has also enhanced their capacity for critical thinking.

According to research findings from Halim et al., (2024), gender, age, and university program significantly influence students' perceptions of using social media for teaching and learning. This means that the use of the internet, particularly social media for education, has a different impact on learning at each level. Learners need to decide which social media site they want to use as well as who they want to communicate with and what resources they want to access. They might have figured out how to use platforms differently in a professional context than they do now, so they feel more at ease in their new persona (Reid et al., 2023).

Research conducted by Utimadini et al., (2015) found that learners would want to suggest Twitter as a tool for learning English as a foreign language because of its advantages. The tools for learning English and the fact that Twitter is a simple and enjoyable way to learn the language are the advantages that the students point out. But Twitter offers more than just a simple and enjoyable way to learn English—it also offers resources for language learners. The recent increase in Twitter's character limit from 140 to 280 is probably going to have an impact on how people express

themselves. It might also lessen the amount of "bad" grammar—skipping prepositions or articles, for example—and acronyms and abbreviations that are utilized (Rosell-Aguilar, 2018).

The results in this study are based on a survey that was given to students who had utilized Twitter to learn about their perspectives. The questionnaire consisted of 20 items, and the majority of respondents indicated their agreement with the items by checking the "Agree" box on the Likert scale. Twitter was seen favorably by the participants, particularly in terms of fostering critical thinking.

The findings revealed that 35% of respondents said they liked integrating ideas from other literature. However, the statement "I base my opinion on a variety of facts that I integrate with one another" was also agreed upon by 65% of respondents. In addition, 53% of participants acknowledged using practical examples to support their positions during discussions, and 45% of respondents said that they check a variety of sources in order to assess the accuracy of the material. Of the respondents, 45% acknowledged that they paid attention to the statements' backgrounds, undertones, and complexities they have read.

The participant interviews also demonstrated the good perspective of utilizing Twitter to enhance critical thinking abilities. They acknowledged that Twitter may be a helpful resource or tool for learning, particularly when seeking out critical viewpoints. Because they make it simpler to obtain more comprehensive and in-depth information, many of Twitter's features are helpful and can support in learning. You will find more helpful content on Twitter the more you browse around. A few drawbacks of Twitter include the fact that hoaxes can be disseminated there, therefore you need to double-check your information.

The usage of social media can improve critical thinking abilities, according to further research conducted by Sherman (2014), as students use social media more often—especially when it is part of their coursework for language learning—they can improve higher order thinking abilities by evaluating the reliability of different information sources. This aligns with research by Nimah (2022), which stated that students who oftentimes use Twitter are more likely to have high critical thinking skills, and that using Twitter frequently increases the skill. The researcher also concluded that using Twitter to influence students' critical thinking is an effective learning strategy.

CONCLUSION

The purpose of this study is to determine whether using Twitter more generally is associated with developing critical thinking skills. Researchers have concluded that Twitter can help users develop their critical thinking skills based on the data collecting that has been done. Twitter, a social media platform, facilitates users' access to information and allows them to engage with a broader audience, including those worldwide. With features that are simple to use and comprehend, Twitter can also be a useful tool for learning English. All things considered, Twitter is a great place for discussion, learning new point of views, and developing critical thinking abilities.

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