Research Article



EFL students' participations and teachers' roles in online discussion forum for critical media literacy learning

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Citation: Afrilyasanti, R., Basthomi, Y., & Zen, E. L. (2023). EFL students' participations and teachers' roles in online discussion forum for critical media literacy learning. *Contemporary Educational Technology,* 15(2), ep414. https://doi.org/10.30935/cedtech/12965

ARTICLE INFO

ABSTRACT

Received: 4 Nov 2022 Accepted: 6 Feb 2023 The global expansion in the Internet access and the rise of digital media are compatible with students' characteristics as generations-Z who mainly engage in nature through mobile applications. Because of the characteristics of today's students and the growth of digital media and information, there is a need for critical media literacy (CML) instructions and the use of digital-based and student-centered learning approaches such as online discussion forums (ODFs). Through an exploratory study, we aim to understand better students' perceptions of ODF for their CML learning within EFL classes, factors affecting students' active participation in ODF, and teachers' roles in ODF while facilitating students' CML learning in an EFL context and enhancing students' engagement and performance in ODF. 250 EFL students from Indonesian secondary schools took part in this study. The participating students were studying English with CML embedded into the lessons. The research showed significant conclusions about factors that need to consider while having ODF in CML learning within the EFL context and the roles of teachers in ODF. We have also provided some practical and feasible suggestions from which practitioners in the area might benefit.

Keywords: critical media literacy, digital literacy, EFL classes, students' perception, teachers' perception, online discussion forum

INTRODUCTION

The global expansion of the Internet access and digital media equates to students' features as generations-Z who are notably involved in nature via mobile applications. Furthermore, since digital media has become the primary source of everyday knowledge (Mailizar et al., 2022), students access and analyze relevant information and sources to enhance and widen their learning process. With the abundance of information available on the Internet and students' lack of critical media literacy (CML) skills (Lim & Tan, 2020), they can be easily misled by misleading information and hoaxes (Mukhtar & Putri, 2021; Tagg & Seargeant, 2019). Therefore, there is an urgent need to include technology in classroom instruction, integrate CML instructions, and meticulously select appropriate applications, particularly for CML instruction (Afrilyasanti et al., 2022).

Based on the nature of CML learning, which involves media selection, information understanding and analysis, and media production (Afrilyasanti et al., 2022; Akinbadewa & Sofowora, 2020; McAnulty, 2020),

This study is part of the PhD project of the first author.

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discussions become effective learning activities for strengthening students' CML skills. In these digital environments, online discussion forums (ODFs) have been widely used to improve in-class learning for their potential to enable teachers to expand their language lessons and enhance face-to-face interactions (Balaji & Chakrabarti, 2010; Chen & Looi, 2007; Nielsen, 2013; Sari, 2020). Furthermore, ODF has been demonstrated to be an effective tool for developing and improving critical thinking and writing skills (Aloni & Harrington, 2018), promoting interactions, establishing learning communities and connections, facilitating cognitive thinking, and enhancing students' exploratory learning (Jose & Abidin, 2016), and improving communication skills that can also construct knowledge (Sun et al., 2017).

However, despite its benefits and positive effects, ODF has some challenges, notably in teacher participation, whether they need to direct discussions or stand back and observe the students' involvement and interactions inside the panels (Kadagidze, 2014; Mazzolini & Maddison, 2005). According to Sari (2020), the effectiveness of the ODF is inextricably linked to the positions of instructors and learners. Teachers' role in encouraging students' engagement in online learning is crucial (Inder, 2022). Teachers can encourage various sorts of student participation in a variety of ways. Within ODF, interactive and active learning activities are closely affected by instructors' duties as expert manipulators who pose questions, issue directions, and other reinforcements to stimulate students' opinions and responses to create a vibrant classroom (Nurjanah & Pratama, 2020; Rido & Sari, 2018), as well as duties to generate discussion rules such as discussion participation compulsion and content courses (Sari, 2020).

Aside from teachers' roles, additional elements influencing students' active engagement include students' existing knowledge of the topic, interest, commitment, and beliefs (Khalid, 2019), as well as the adoption of user-friendly appropriate teaching media and an interactive learning atmosphere (Sari & Putri, 2019). Therefore, in terms of the discussion topic, it is suggested to use localized examples and the contextual case for the discussion topic (Ayu, 2020). Furthermore, students' involvement in ODF can be boosted by learning with web-based learning technology, instructor assistance, and reinforcement (Darmawansah & Indartono, 2019). Students' participation in ODF becomes critical to maintaining the discussion and stimulating active collaboration in group work and discussion, sharing thoughts and ideas (Farizka et al., 2020).

The necessity for CML skills in an era of information and media explosion, as well as the benefits that ODF provides in allowing students to strengthen both language and CML skills, led us to conduct this study. More emphasis is needed on how ODF might be improved to facilitate students' language and CML acquisition within an EFL framework. As a result, it is critical to examine students' perspectives on it. The study's goal is to reflect on students' viewpoints while they participate in the teaching and learning process. This manuscript attempts explicitly to address the following research questions.

- 1. How do students perceive ODF for their CML learning within EFL classes?
- 2. How does a teacher's participation in ODF influence student participation in discussions?

THEORETICAL FRAMEWORK

CML encompasses the role of practical online media in fostering meaningful media literacy as well as providing students with ample space to express their thoughts and perspectives (Currie & Kelly, 2021). Many academics describe media literacy education as a tool for strengthening students to comprehend and evaluate information, as well as to use critical thinking regarding media and technology as active members (Hobbs, 2011; Kellner & Share, 2005) to promote the growth of empowered and active citizenship (Bergstrom et al., 2018). Kellner and Share (2007) described media literacy as a comprehensive framework in which media literacy instruction includes critical thinking learning as well as learning how to use media and technology as tools for communication and social change. It comprises media selection, information processing, and analysis, as well as an evaluation of the impact of interplay on, off, and beyond the screen (Kersch & Lesley, 2019) and media production (Afrilyasanti et al., 2022; Akinbadewa & Sofowora, 2020; McAnulty, 2020).

Those CML competences possess constructivist approach qualities in some way. Constructivist approach emphasizes learning by doing, with the notion that the more pupils actively participate, the more successful they become. It is founded on psychology and philosophy, with roots in the work of Dewey, Bruner, Vygotsky, and Piaget (Abualhaija, 2020), and contends that human knowledge is socially generated and constructed by

students' prior knowledge (Bada, 2015). Furthermore, the constructivist approach promotes student-centered learning and the development of social values. Thus, Grundy (1991) proposes employing a constructivist approach to help students become autonomous, curious thinkers who question, explore, and reason. This approach enables teachers to make decisions that benefit and enhance students' learning growth (Grundy, 1991).

In general, CML can be effectively taught through student-centered learning in which students participate actively and are provided with context-specific discussions they are familiar with (AlNajjar, 2019). In this regard, by implementing student-centered teaching practices, students simultaneously cultivate a sense of community and citizenship as well as other life skills such as critical thinking, collaboration, creativity, and communication (Buitrago-Florez et al., 2021; Coskun, 2021). Teaching CML through collaborative learning activities, as indicated by ODF, promotes students' learning motivation, cognitive development, and openmindedness (Warsah et al., 2021). Accordingly, ODF has been verified to provide a wide range of opportunities for students to learn the language and acquire knowledge autonomously (Sari & Wahyudin, 2019) through discussions of current societal issues (Coskun, 2021).

However, ODF is critical to creating a positive atmosphere (Daud et al., 2016; Glass & Walter, 2000; Khalid, 2019; Terehoff, 2002) and supporting partnerships (Bierema & Merriam, 2002). A supportive classroom environment develops when students are involved and appreciated, such as through informal discussion. Students are more likely to participate in informal discussions than formal encounters (Ensher et al., 2003). Sociocultural and contextual topics have been well received in classroom discussions due to their opportunity to provide an informal and positive learning atmosphere (Lieberman, 1995). On the other hand, students frequently exploit the informal ambiance of the discussions such that the discussions do not run within the topics. Therefore, teacher roles in ODF significantly influence how discussions evolve. Based on teachers' critical roles in ODF, this study aimed to reflect on students' perspectives while participating in ODF and what types of teacher interventions they are compelled to have within ODF.

METHOD

The literature tells us little about how teachers should position themselves in ODF to assist students' CML and language learning. More immediate evaluative investigations of particular ODF learning are likely to emphasize the larger picture only in an EFL context. The study discussed here attempted to contribute to bridging these gaps by pursuing the research questions outlined. Furthermore, this study employed an exploratory research design because of its inherent simplicity, flexibility, and prominence for comprehensively and richly defining a phenomenon (Saunders et al., 2009). We believe that the exploratory method is the best fit for providing a broad insight into the use of ODF for students' CML learning within an EFL context, as well as detailed information about students' perceptions, factors affecting the students' engagement in ODF, and teachers' roles in ODF based on students' perspectives. In addition, qualitative data collection procedures were used to gain a more comprehensive, systematic, and contextual understanding (Jick, 1979).

Participants

250 EFL students were studying at the secondary school level participating in this study. They were 15-18 years old and were students in classes taught by the researchers. We recognize that the researchers' involvement may have an impact on the limitation of internal validity; consequently, triangulation, which involves the verification and validation of qualitative analysis, was employed to address it (Burns, 1994; Wiersma, 1986). Due to practical constraints (as per school principal's policy), there was no random sampling of participant selection. The students have used ODF to learn CML in their EFL classes. Because the majority of the students were under the age of 18, we sought permission from their parents or guardians to participate in the study prior to data collection. As soon as we received consent from their parents, we notified the students about the study plan before we began collecting the data. They were also informed that they might withdraw from the study at any time if they were no longer interested in participating. The data collection period lasted for three weeks. During the discussions, students were ordered to post at least two questions or comment on each topic and respond to at least two questions posted by their peers. Five cases were

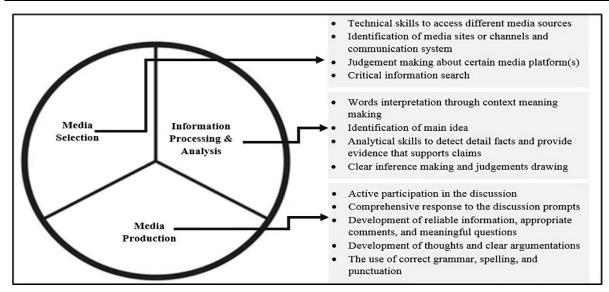


Figure 1. CML competencies components in ODF (Source: Authors)

discussed in the ODF. The ODF students clarified their understanding of critical concepts and trained their writing and communication skills.

Data Collection and Analysis

To study the teachers' roles in ODF, we evaluated what the teacher and students posted in ODF and used an open-ended questionnaire, observations, informal group discussions, and interviews to encourage participants to talk as freely as possible so that the research issues could be investigated via the participants' perspectives (Daymon & Holloway, 2002). The combination of these several instruments resulted in the collection of multiple data sets, which were then analyzed and triangulated to enhance reliability (Lincoln & Guba, 1985). The examination of forum postings comprises a look at the elements that influence students' participation in ODF and the frequency of student involvement due to the teacher's participation frequency and characteristics. Teachers' post characteristics in ODF include the timing of the posting (at the beginning, middle, or end of the conversation) and the forms of the posts. Furthermore, the questionnaire and interview results could give a plethora of data from students regarding their perceptions of using ODF for learning and teachers' roles in ODF regarding participation frequency and post characteristics.

We developed CML competencies components to allow us to observe students' learning progression more efficiently, including media selection, information processing and analysis, and media production (Figure 1).

Students' ability to select media is indicated by their ability to access multiple media platforms, analyze various media sources, judge those sites, and critically explore the material. Furthermore, students' ability to process and analyze information is demonstrated by their ability to develop interpretations of the language used through the context meaning-making process, identify the main idea, analyze facts and evidence to support claims, and produce conclusions. Meanwhile, students' media production skills can be seen in their active participation, providing comprehensive responses to discussion prompts, developing reliable information, creating meaningful questions to guide the discussions, developing their thoughts and arguments, and using correct language structures. As the data was collected, we transcribed and analyzed it to organize it into topics. The data was then reduced by filtering, segmenting, and summarizing it. Following that, we used coding and meaning-making to investigate emergent categories to better comprehend the data's message. The data was then displayed, defined, and confirmed. We returned back and forth between the categories and the dataset to verify their validity and reliability. While attempting to convey the findings, we reviewed and re-read data sets, cross-checked among study team, briefed, and listened to the recording.

Table 1. Students' CML competencies observed in ODF

No	CC	SC SC	Descriptions		
110		<u> </u>	Showing the ability to apply technical skills to access various media sources.		
1	Media selection	excellent competence 50% showed good competence	 Demonstrating ability to explore information & conduct critical information searches. Showing ability to discern media content & identify sites, media channels, & communication systems. Showing ability to judge a certain platform before trusting the presented information. Showing the ability to apply technical skills to access various media sources. Demonstrating the ability to explore information but struggling to provide judgments 		
		competence	about a certain platform.		
	Information processing & analysis	20% showed excellent competence	 Showing the ability to create unambiguous inferences that state or imply the main idea of certain information read/heard. Demonstrating the ability to detect facts, provide analytical evidence to support claims, and draw judgments. Showing the ability to interpret unfamiliar words based on context. 		
2		60% showed good competence	 Showing ability to identify main idea & a few details about news article read/heard. Struggling to give evidence and draw conclusions. Showing their understanding of familiar words when they are used in familiar contexts. 		
		16% showed fair competence	 Showing the ability to interpret individual words significantly impairs their understanding of the news article read/heard. Showing the ability to identify the main idea but not provide details or textual evidence to back judgments. 		
		4% were lacking	 Not understanding the words well enough to identify the main idea or any details about the news article read/heard. 		
	Media production	10% showed excellent competence	 Demonstrating the ability to respond to discussion prompts comprehensively and to understand information with well-developed thoughts. Showing the ability to develop reliable information, appropriate comments, and meaningful questions. Writing with proper grammar, spelling, and punctuation. 		
3		50% showed good competence	 Addressing most of the prompts and exhibiting a basic understanding of content through well-developed ideas. Showing ability to make suitable remarks & respond appropriately to others' postings. Showing attempts to steer the discussion and to present relevant viewpoints. Having less than five grammatical, spelling, or punctuation errors in their writing. 		
		38% showed fair competence	 Addressing a small number of prompts. Frequently making just brief remarks. Having difficulties participating in the discussions. Making 4-5 grammatical, spelling, or punctuation errors in their writing. 		
		2% were lacking	 Failing to address all components of the prompts. Making irrelevant comments. Making little effort in responding to comments and participating in the discussions. Making many errors in writing. 		
NI-4	Note CC: Competency component & SC: Students' competence				

Note. CC: Competency component & SC: Students' competence

RESULTS DISCUSSION

Students' Perceptions of ODF for Their CML Learning in the EFL Setting

The study's first findings concern students' perceptions of their participation in ODF for CML learning within an EFL setting. This research provides an overview of the online activities that students experienced during the online learning process utilizing ODF.

According to the observations on the students' learning progression, students' CML skills varied in each competency CML component: media selection, information processing and analysis, and media production. **Table 1** displays students' CML abilities as they learned with ODF.

All of the students have access to media platforms. It could be because, as generation-Z, students use technology daily to get information (Mailizar et al., 2022). However, many were still unable to distinguish and

Table 2. EFL students' perception of their participation in ODF for CML learning

		udents' perception of their participation in ODF for CML learning
No	SG	Descriptions
1	Acceptance of activity	 ODF is more effective than face-to-face discussions since timid people can participate by writing their comments. Some students consider that the rules requiring them to present at least two comments/questions and respond to at least two others' comments/questions are ineffective since they do not always have something to say about the topic. More students appreciate the rules for posting or commenting since they encourage everyone to participate in the discussions.
2	activities	 Students discuss and decide on the discussion topic. Students respond to the discussion topic/question provided by the teacher/discussion leader. Students make at least two posts. The posts can be a question or comment on each topic. Students comment/respond to at least two questions posted by their peers. Students take notes on the essential points or materials discussed in ODF. Students and teachers keep the topic flow going by participating in the discussions. Students and teachers keep the discussion focused on the topic of the meeting. Students and teachers provide feedback and correction for incorrect structures or diction. Students conclude the discussed topic and make a reflection.
3	Discussion topics	 Teachers provide discussion topic recommendations. Similarly, students might suggest a topic for discussion. The discussion topics are those that can lead to CML learning. Students choose, discuss, and decide on the discussion topic. The majority of students prefer to talk about current events in society. Students can browse and review internet materials during the discussions to better comprehend the selected discussion topic. Students are anxious to discuss and dissect real and false news.
4	in	 Each student contributes to the discussion by at least adhering to the discussion rules. Some students contribute more than the required number of postings in the discussion. All students agree that the discussion rules compel students to participate in the discussions. Lesser students contribute when it comes time to conclude the discussion. Restricted facilities and access to the internet influence students' participation in ODF.
5	Language & CML learning in ODF	ODF enriches and contextualizes language and CML learning. Many students said they feel more comfortable learning certain language concents through ODF.

Note. SG: Statement groupings

assess media platforms and make thorough judgments in selecting reliable media sources since only 30% of students could do so. Meanwhile, most students (50%) could not make judgments regarding specific media sites. Likewise, only a small percentage of students (20%) displayed remarkable information processing and analysis skills. More than half of all students (60%) continued to struggle with providing evidence and drawing judgments. Teachers should continue to stimulate them by asking leading questions. Even 4% did not grasp some of the languages in the news articles they read. As a result, they discovered that finding information about the news is still tricky.

Students' difficulties conveying evidence to back their judgments and developing conclusions impact their media production abilities. 38% of students still struggled to participate in the discussions, with 2% failing to address all components of the discussion prompts and making irrelevant comments. However, it is commendable that many of them (50%) attempted to participate and steer the discussions. Likewise, 10% exhibited great competence by presenting comprehensive arguments, developing accurate information, and posing meaningful questions. More data findings were gathered from the questionnaire, focus groups, and interviews on students' prevailing attitudes toward ODF (Table 2).

As seen in **Table 2**, most students' responses are positive. Students believe ODF is more effective than face-to-face discussions and encourages everyone to contribute actively. Students' acceptance of ODF might be tied to their Z-generational characteristics and the proliferation of technological media and literacy trends in which social media or other applications are widely used and incorporated in the classroom context (Manca, 2020). Furthermore, to keep the discussion going, the teacher imposed some forum rules on the students to

which most responded enthusiastically. However, some students objected to the regulations, as demonstrated in excerpt 1.

Excerpt 1

"There are moments when I do not know what to say or write. So I usually type, 'that's amazing,' 'that's good,' 'I agree with you,' 'you are correct,' or any other brief response that does not necessitate explanations."

"I understand that our teacher wants us to actively participate in the discussion by establishing those ground rules. But there are times when I do not know what to write. So, perhaps the rules can be amended to 'everyone must contribute' without mentioning the contribution limitation."

The rules in ODF are necessary to keep the discussions going (Sari, 2020); nevertheless, teachers should involve students in the rule-making process by learning from the students' opinions on the assigned rules in ODF. So, the discussions become more relevant to the student's interests, commitments, and perspectives (Khalid, 2019).

Furthermore, based on the observation of the ODF practices, it is discovered that ODF exercises involve determining a discussion topic, publishing opinions on the subject, replying to peers' comments, taking notes on relevant resources, providing feedback, and correcting language problems, concluding, and reflecting on ODF learning experiences. The study results suggest that it is essential to choose activities that elicit student responses and active participation in discussions since student participation is critical for creating a dynamic classroom atmosphere and keeping discussions alive (Farizka et al., 2020; Nurjanah & Pratama, 2020).

Additionally, it is critical to select a discussion topic that the students are familiar with; accordingly, Ayu (2020) proposed using localized examples and contextual issues for the discussion topic. Students highlight specific criteria that should be considered when choosing a discussion topic in open-ended questionnaires and interviews. These include student participation in proposing and selecting the discussion topic, the freshness of the issues or topics covered, and the inclusion of widespread or current societal concerns.

Excerpt 2

"I am pleased that our teacher. Instead of providing a certain topic for the discussion topic, she allowed us to choose the topic for our discussion. Talking about the topic we chose allows us to talk more during the discussion because we are interested in the topic."

"It is exciting to discuss what is currently going on in society since we are updated with the topic and can easily access information that allows us to participate actively in the discussion."

While discussing a specific issue, teachers should also include discussions on how students analyze the accuracy of certain information, as with the abundance of contemporary media and their lack of CML skills (Lim & Tan, 2020), they can be easily deceived by misleading information (Mukhtar & Putri, 2021; Tagg & Seargeant, 2019). Surprisingly, the observation findings suggest that students are motivated to discuss it. Moreover, while discussing student participation in ODF, it is interesting to note that fewer students contribute when it comes time to provide a conclusion to the discussion. When we asked students for their thoughts on this finding, we discovered that they still had difficulty concluding.

Excerpt 3

"It is difficult to recall what we have discussed, synthesize, reflect, and conclude. It is easier to react to specific questions."

"I have difficulties synthesizing the important points of the discussion, especially when the topic is quite tough. I need clues or provocative questions from my teacher to help me conclude the discussion results."

As a result, teachers' involvement in ODF becomes critical (Sari, 2020). Teachers can act as experienced discussion stimulators and facilitators by posing questions, giving instructions, and providing other reinforcements to stimulate students' opinions and responses. This result is unquestionably identical to the effects of earlier studies (Nurjanah & Pratama, 2020; Rido & Sari, 2018). Students will gradually develop the ability to conclude the results of the discussions if they are given graded direction in the form of stimulating questions.

Further, the findings on students' participation reveal that, in addition to their perspectives on teacher intervention in ODF, inadequate facilities and the Internet access are other variables influencing their involvement in ODF. Oman students in Jose and Abidin's (2016) study experienced similar technical challenges with facilities and the Internet connection. However, unlike Indonesian students, these issues and constraints were not used to justify lesser student participation in ODF.

Then, the findings on the use of ODF for language and CML skills confirmed that students could acquire language and CML more comfortably through discussions about current social concerns. They can progressively enhance their communication abilities (Sun et al., 2017) while achieving the content (Sari & Wahyudin, 2019). As seen by their responses to the questionnaires and interviews, students improve their critical thinking skills (Aloni & Harrington, 2018) and other life skills such as problem-solving, analytical thinking, and decision-making (Coskun, 2021). However, further explanation beyond the discussions is required, mainly when dealing with crucial content materials and linguistic principles, to provide more aid in students' learning and avoid misconceptions.

Excerpt 4

"Through discussions, I can better comprehend some topics. I know what to do before trusting material I read on the Internet since I discussed it with my peers and my teacher. Not only that, but the discussion also made me more critical and analytical in some situations."

"I learn to interpret specific meanings conveyed by certain sentences or information from my ODF friends."

"I learn from my peers how to deal with certain issues. I also learn to analyze information and draw conclusions from the discussion."

Excerpt 4 demonstrates that students' impressions of ODF for CML in their language classes confirm that ODF enables students to acquire CML and language skills. Students agree that they learn from their classmates, implying that there is an aspect of skill involvement and collaborative work that allows them to share knowledge. Furthermore, as previously stated, discussion topic and activity selection, as well as teacher roles, are other important factors that affect the success of ODF implementation to assist students' CML and language learning in an EFL setting. To conclude, **Figure 2** depicts teacher and student interaction and activities in ODF for CML learning within an EFL context.

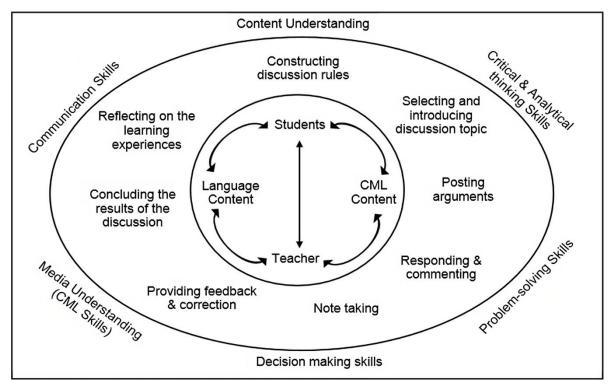


Figure 2. Teacher-student interaction and activities in ODF for CML learning within an EFL context (Source: Authors)

In the interactions between students and teachers in ODF for learning CML in the EFL context, students learn both language and CML content. Within CML learning using ODF, student-teacher interaction occurs through various learning activities such as the construction of discussion rules, the selection, and introduction to the discussion topic, the generation of arguments and comments, note taking, the feedback and correction process, conclusion drawing, and reflection. These activities were all performed within the context of analysis and discussion. The discussions on media sources and news articles allow students to learn about diverse issues within CML content while improving their reading, to listen, and writing skills. Further, through the learning activities within ODF, students gradually develop their content understanding, critical and analytical thinking, problem-solving, decision-making, media understanding, and communication skills.

The provocative questions in the form of open-ended and reflective inquiries encouraged the students to understand information thoroughly and critically, analytically and creatively find ways to solve the given problems, and clearly explain their views in a communicative manner. However, because of Indonesian students' docile nature, which their sociocultural backgrounds might influence, their teachers' roles in ODF must be adequately enforced to optimize the development of those skills. Students in the ODF process tend to only respond to teachers' inquiries. They would also start asking questions during the discussions only as instructed.

Teachers' Participation in ODF for CML Learning in the EFL Context

The effect of teachers' intervention frequency in ODF on students' participation

Observing the results of students' participation in ODF, it is clear that students only perform what is required: post at least two questions or comments on each topic and respond to at least two questions made by their peers. Even though only a few students contributed more than the required number of postings on the issue, the discussion appears to be lively as it continues. Students submit only when necessary because they are primarily concerned with the teacher's assessment of their work, as evidenced by their comments in excerpt 5. They are unmotivated to do more to advance their learning.

Excerpt 5

"I submitted what was required because there were times when I did not know what to post. So, after posting the minimal number of participation requirements in ODF, I stopped posting. I recently became a silent reader."

"I think if I posted as required, I would have passed the class. I believe that is enough."

Furthermore, based on ODF process observations, students are more inclined to show up and participate in the discussion when they know the teacher is also present. When the teacher asks a question or comments, the students promptly answer. No student comes up and contributes when the teacher observes the discussion. Prior research (Mazzolini & Maddison, 2005; Nielsen, 2013) showed that teacher participation in ODF has a minor impact on student participation. According to previous studies, the more teachers post, the fewer students post. Conversely, in the case of Indonesian students, as demonstrated by the results of the observation and interviews, the more frequently the teacher posts, the more students post. This finding confirms the earlier study result that Indonesian students are mainly interested in their teacher's evaluation. To verify this finding, the teacher increased the frequency of new postings and responded to every single message sent by the students. Interestingly, students participate and post more as the teacher posts. The interaction occurred between the teacher and the students and among the students themselves. The primary requirement for online courses' success is increasing ODF participation (Bender, 2003). Further, increased discussion communication may optimize learning potential (Holmes, 2004). In the interview, students clarify reasons for not posting when the teacher does not post.

Excerpt 6

"When the teacher posts, I have to respond so she knows I'm participating in the discussion. Meanwhile, if she does appear in the discussion, I do not think I need to post because it will be pointless. She will not even notice."

"I need my teacher to know that I actively engage in the discussion. It's worthless to post if she's not joining the discussion."

"My friends and I will be hesitant to post if our teacher is not participating in the discussion. I am excited when my teacher replies to my comment, and I believe my friends feel the same way."

The students' comments indicate that they value the teacher's active participation in the ODF. When the teacher is highly engaged in the discussion, the students acknowledge that they are motivated to contribute. Students' reactions also show that they are still concerned about their grades. They have not regarded discussions as a learning process in which, whether their teacher participates or not, they must keep the discussion running to enhance their understanding and skills.

Additionally, in ODF, students do not only learn about the CML topics under discussion but also about the language structures they use in their comments. According to the findings, the majority of students prefer more immediate feedback. When the teacher waits for the other students to respond, the students perceive the teacher's participation as passive. As a result, there is even no involvement and communication. This finding validates Ozdemir and Aydin's (2015) idea that in ODF, teachers should actively provide comments on students' responses and feedback and corrections on their errors. Feedback and corrections offered to one student will indirectly help other students learn and comprehend more about the concept.

Finally, according to the findings, ODF assists students in learning the language, CML, and other life skills. It has also been demonstrated that the position of teachers in ODF influences students' active participation. In the case of Indonesian students, the more teachers who post, the more frequently students post. In other cases, however (e.g., Jose & Abidin, 2016; Nielsen, 2013; Mazzolini & Maddison, 2005), the more teacher posts, the fewer student posts. As a result of this research, teachers should examine students' reactions and learning needs to increase students' active engagement in ODF.

Teachers' roles in ODF according to their posts

Given the results of teachers' involvement in ODF, it is vital to learn more about teachers' roles in ODF. As previously indicated, the teachers' prominent position in ODF is mainly demonstrated by their online presence. This presence has the potential to stimulate and inspire fruitful discussions. Based on the analysis of the frequency of the teacher's intervention, it was discovered that in EFL classrooms in Indonesia, the teacher must be fully involved in the discussion at the beginning, middle, and end. Students' interview responses, as seen in excerpt 7, demonstrate students' expectations of teachers' active participation in the ODF process.

Excerpt 7

"Of course, the teacher cannot just say, 'Let's discuss this or that.' We need to know what to do and how to do it."

"It will be easier for us to discuss when the teacher opens the discussions by providing us with topic choices or asking specific questions since it gives us insights on what we should talk about."

"I enjoy it when my teacher shows up during a discussion when we're all stuck and do not know what to say or how to keep the topic going."

"When it comes time to summarize the results of our discussions, we typically remain silent because making conclusions is not easy. So, it's great when our teacher appears in the discussion and provides hints or questions that prompt us to conclude."

These findings clearly illustrate the roles that teachers must play when helping students learn in ODF. Before the discussion, the teacher should introduce learning activities that the students have in ODF and establish clear rules and guidelines to ensure that the discussion is constructive and focused on the discussion topic (Ko & Rossen, 2001; Suler, 2004). The teacher needs to ensure that all students comprehend the ODF applications or platforms, how to access the online forum, and how to post and take part in discussions. The requirements should also contain discussion regulations, such as the obligation of student postings, appropriate use of the target language, avoidance of foolish jokes and insults, and norms relating to civility and incivility, as well as the discussion assessment process (Jose & Abidin, 2016).

An appropriate introduction to the topic of the ODF must be provided as the rules and procedures are described and explained to them to support the success of the discussion (Levine, 2007). According to Baviskar et al. (2009), when introducing a topic, the teacher should elicit the students' prior knowledge to motivate and stimulate them to participate. When familiar discussion subjects are provided, they are more confident contributing since they know what to say. Furthermore, the ODF process observation shows that the students are motivated to post when the teacher publishes essential opening questions on widespread societal concerns. It occurs because students know the topic, prompting them to respond and gain more about it.

During ODF, which is remarkably similar to the initial talks, teacher comments in the form of questions are still encouraged (Hamdan et al., 2017; Omar et al., 2018). Also, follow-up questions to expand on the discussion. Moreover, the teacher needs to be able to encourage students to respond to questions as extensively as possible. Rovai (2007) presents some strategies for teachers to maintain an active online discussion. It entails constantly being involved in the discussion to keep up with the talks. Executing this by making posts expressing appreciation, agreement, support, and encouragement is possible. Furthermore, the teacher can keep the discussion on track by reviewing the results frequently and asking thought-provoking questions.

Such strategies underline that the teacher's posts during the discussion process are not limited to questions and responses. It is also critical for the teacher to address any misleading answers given by students and correct and explain any errors or inaccuracies in language use. According to a previous study by Kaupmees (2015), students anticipated receiving feedback on their sentence construction, spelling, and other errors in language use. This result differs from the current study's findings in that most Indonesian ODF

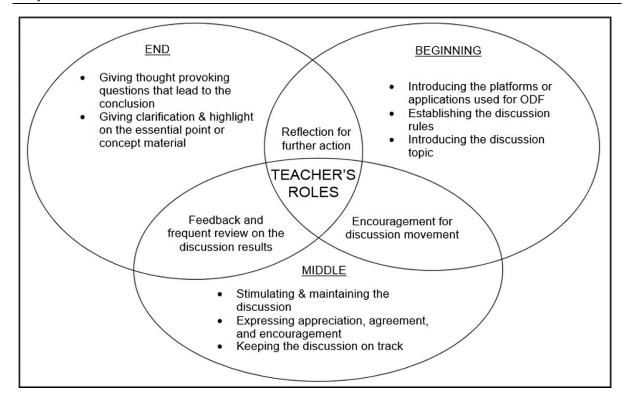


Figure 3. Teachers' roles in ODF (Source: Authors)

participants prefer to have their teacher respond to the content of their arguments rather than correct their grammatical errors. Aside from that, the teacher's correction and feedback on the student's linguistic errors are critical. However, when addressing mistakes, teachers should avoid statements that appear harsh or too critical (Rovai, 2007). As a result, not just students but, more significantly, teachers should be mindful of their language usage.

Additionally, as previously demonstrated in earlier studies (i.e., Nurjanah & Pratama, 2020; Rido & Sari, 2018), the teacher's intense and appropriate intervention in an ODF helps inactive students participate in the discussion. According to Gerbric (2005), ODF provides opportunities for specific groups of students who are often passive in face-to-face classroom discussions. Teachers' remarks and encouraging responses to their posts help to create a secure and encouraging atmosphere for them to participate actively. They are driving themselves to post and are taking a chance to contribute. Receiving no reaction or overly critical remarks can be pretty detrimental to them. Therefore, Hew (2015) highlights that well-structured and adequately assisted ODF provides differentiated instruction that enables the rapid integration of new knowledge and life skills to the students. Furthermore, at the end of the discussion, the teacher's posts are mainly questions that lead to a conclusion and clarification to highlight the essential issues covered and concepts incorporated. This clarification and determination should be brought up throughout the interactive discussion. Thus, students may see a link between in-class and online meetings. In short, teacher postings in ODF (at the start, middle, and end) can take several forms, including foregrounding, questioning, evaluating, explaining, reviewing, reflecting, and reconsidering problems or challenges (Gorsky & Caspi, 2005). Different postings should be implemented and combined with a vigorous and long-running discussion.

As depicted in **Figure 3**, teachers should post not only before (at the start of the forum) but also during and after it. The teacher's post at the start of the forum is intended to establish the topic of discussion while also initiating and encouraging student engagement. The teacher's intervention in the middle of the discussion is designed to direct, provide feedback, correct, encourage more discussion, and maintain the discussion on track. The teacher's post at the end of the forum assists students in concluding the discussion. Finally, in ODF, teachers should support students in retaining the main topics they intend to learn throughout the discussion.

DISCUSSION: TOWARD STUDENTS' PARTICIPATION AND TEACHER'S ROLES

Many scholars (i.e., Akinbadewa & Sofowora, 2020; McAnulty, 2020) showed that CML learning includes three competency components: media selection, information processing and analysis, and media production. In line with that, Kellner and Share's (2007) comprehensive framework in CML mentioned the coverage of media literacy instruction, including media comprehension, critical thinking, and the use of media for communication tools and social change. Although their explanation seems to encompass all abilities required in life, the current study confirms the necessity to include other skills such as analytical thinking, problem-solving, and decision-making. The need to distinguish analytical thinking from critical thinking skills results from the distinct focus required to assist students who lack particular skills in CML.

Although students responded positively to their CML learning using ODF, their learning progression in CML skills revealed in this study that their incapacity to make judgments affects their skills across all three CML competency components. To make sound decisions, information must be carefully evaluated and interpreted. Those evaluating and solving skills are considered part of critical thinking skills. In terms of media selection, most students struggled with making judgments about specific media sources before entrusting them. Regarding information processing and analysis, most students struggled with giving evidence and drawing judgments. Students' capacity to break down complex material or extensive data into core elements or basic principles is required for evidence and conclusion forming, which we regard as part of the analytical thinking process. Meanwhile, students in media production struggled to communicate their relevant points of view.

How to assist students in overcoming their difficulties with evidence gathering and decision making can thus be handled by the teacher performing suitable intervention roles. Clear discussion rules, students' involvement in rule creation and discussion topic selection, familiar discussion topics, and teacher involvement and intervention in ODF are all possible explanations for students' perceptions of development, whether factual or perceived. However, the findings on the role of teacher intervention in ODF contradict previous studies (Mazzolini & Maddison, 2005; Nielson, 2013), which stated that teacher participation in ODF has a modest impact on student participation. Due to students' concerns about performance appraisal, Indonesian students are more likely to participate in ODF when the teacher participates and engages.

Additionally, students improve both language skills and CML content in the interaction between students and teachers in ODF for learning CML in an EFL context. Through ODF learning activities, students gradually develop their content understanding, critical and analytical thinking, problem-solving, decision-making, media understanding, and communication abilities. This skill development is aided by teacher comments on students' responses, feedback, and corrections on errors (Ozdemir & Aydin, 2015). The consequence of the need for teacher's content intervention in ODF is taking different roles. This conclusion contradicts the premise of constructivism philosophy, which encourages students in becoming autonomous learners by allowing them to be the center of their own learning (Grundy, 1991). However, based on the nature of Indonesian students, who tend to be submissive, it cannot be argued that this study challenges the prevailing notion of constructivism and student-centered learning. Instead, it can be viewed as part of the learning process. As a result, a longer-term investigation is required to confirm this preliminary results.

CONCLUSION

The study results reveal that for the ODF to be effective in facilitating students' language and CML learning, several factors must be considered, such as supporting facilities, discussion topics, discussion rules and activities, and teacher roles. The first and most crucial consideration is that teachers ensure all students have access to facilities and the Internet. A relevant subject should be offered for a vibrant discussion that allows students to learn and develop the targeted skills. Teachers can present choices for discussion topics and enable students to choose their own. When deciding on a topic, teachers should examine the relevance of the issues and the integration of widespread or current societal concerns. The discussion and analysis of the accuracy of specific information, because of the sheer amount of today's media and their lack of CML skills, can be easily misled by misleading information. Moreover, additional explanation beyond the discussions is

essential, especially when dealing with crucial content materials and linguistic concepts, to enhance students' learning and avoid misconceptions.

The teacher and students should also develop and agree upon some rules and guidelines. Students should be included in the rule-making process. Furthermore, activities that stimulate student replies and active engagement in discussions are vital for generating a dynamic classroom environment and keeping talks alive. Activities within ODF include selecting a discussion topic, presenting opinions on a particular topic, responding to peers' comments, taking notes on relevant resources, providing feedback and correction for language errors, drawing conclusions, and reflecting on ODF learning experiences. Furthermore, the teacher should participate actively throughout the discussion. The teacher's post at the beginning of the forum is intended to establish the discussion topic while simultaneously starting and stimulating student participation. The teacher's intervention in the middle of the discussion is designed to direct, provide feedback, correct, stimulate more discussion, and keep the discussion on the topic. The post by the teacher at the end of the forum helps students conclude the discussion.

According to the underlying data findings, it is recommended that ODF be implemented in a more student-centered manner by gradually reducing teacher involvement in the discussions. It enables students to achieve independence and self-directed learning abilities eventually. Furthermore, teachers should pose stimulating questions that encourage students to broaden their perspectives on information by examining it from several angles. Simultaneously, teachers should progressively train students to question themselves when they read specific material so that they can perceive things from different viewpoints. Debates are also encouraged to allow students to examine the information from various perspectives, appreciate other or opposing points of view, and practice their skills in social interaction.

In short, the current study has a limitation regarding the generality of the results due to the small sample size. A larger group from various topics may have resulted in more diverse student and teacher roles in ODF. We are also aware of the study's brief duration; a longer-term inquiry is needed to confirm these exploratory findings in relation to the student-centered pedagogical approach and constructivism philosophy. Furthermore, this study suggests multiple areas for future research. Studies focusing on using certain ODF apps or platforms can be valuable in providing additional insight into the practical use of specific ODF applications. Furthermore, more emphasis should be given to how ODF might boost students' motivation and life skills.

Author contributions: RA: collected the data & wrote the manuscript; **YB** & **ELZ:** provided proofreading, methodological, & data analysis assistance. All authors approved the final version of the article.

Funding: This article was supported by the Ministry of Education and Culture of the Republic of Indonesia (Kemendikbudristek).

Ethics declaration: Authors declared that participation was voluntary. Since most of the participants were under 18, authors declared that they requested consent from their parents or guardians before collecting data. Participants were also notified that they could withdraw from the study if they no longer wished to participate. The personal data's anonymity has been ensured.

Declaration of interest: Authors declare no competing interest.

Data availability: Data generated or analyzed during this study are available from the authors on request.

REFERENCES

Abualhaija, N. (2020). Constructivism and student-centered learning approaches in nursing education. *International Journal of Nursing Health Care Research*, *5*(7), 1-6.

Afrilyasanti, R., Basthomi, Y., & Zen, E.L. (2022). Tuning up a CMLL toolbox: Analyzing Web-based applications for critical media literacy learning. *Interactive Technology and Smart Education, 19*(4), 544-567. https://doi.org/10.1108/ITSE-07-2022-0088

AlNajjar, A. (2019). Abolish censorship and adopt critical media literacy: A proactive approach to media and youth in the Middle East. *Journal of Media Literacy Education, 11*(3), 73-84. https://doi.org/10.23860/JMLE-2019-11-3-7

Akinbadewa, B. O., & Sofowora, O. A. (2020). The effectiveness of multimedia instructional learning packages in enhancing secondary school students' attitudes toward biology. *International Journal on Studies in Education*, *2*(2), 119-133. https://doi.org/10.46328/ijonse.19

- Aloni, M., & Harrington, C. (2018). Research based practices for improving the effectiveness of asynchronous online discussion boards. *Scholarship of Teaching and Learning in Psychology, 4*(4), 271-289. https://doi.org/10.1037/stl0000121
- Ayu, M. (2020). Online learning: Learning e-learning at higher education. *The Journal of English Literacy Education*, 7(1), 47-54. https://doi.org/10.36706/jele.v7i1.11515
- Bada, S. O. (2015). Constructivism learning theory: A paradigm for teaching and learning. *Journal of Research* & *Method in Education*, *5*, 66-70.
- Balaji, M. S., & Chakrabarti, D. (2010). Student interactions in online discussion forum: Empirical research from 'media richness theory' perspective. *Journal of Interactive Online Learning*, *9*(1), 1-20.
- Baviskar, S. N., Hartle, R. T., & Whitney, T. (2009). Essential criteria to characterize constructivist teaching: Derived from a review of the literature and applied to five constructivist-teaching method articles. *International Journal of Science Education, 31*(4), 541-550. https://doi.org/10.1080/09500690701731121
- Bender, T. (2003). *Discussion-based online teaching to enhance student learning: Theory, practice and assessment.* Stylus.
- Bergstrom, A. M., Flynn, M., & Craig, C. (2018). Deconstructing media in the college classroom: A longitudinal critical media literacy intervention. *Journal of Media Literacy Education*, *10*(3), 113-131. https://doi.org/10.23860/JMLE-2018-10-3-7
- Bierema, L. L., & Merriam, S. B. (2002). Virtual mentoring: Using technology to enhance the mentoring process. *Innovative Higher Education, 26*(3), 211-227. https://doi.org/10.1023/A:1017921023103
- Buitrago-Florez, F., Danies, G., Restrepo, S., & Hernandez, C. (2021). Fostering 21st century competences through computational thinking and active learning: A mixed method study. *International Journal of Instruction*, *14*(3), 737-754. https://doi.org/10.29333/iji.2021.14343a
- Burns, R. B. (1994). *Introduction to research methods*. Longman Cheshire.
- Chen, W., & Looi, C. (2007). Incorporating online discussion in face to face classroom learning: A new blended learning approach. *Australasian Journal of Educational Technology*, *23*(3), 308-327. https://doi.org/10.14742/ajet.1255
- Coskun, H. (2021). Media as a learning-teaching tool in the context of media literacy from Turkish language teacher candidates' perspective. *International Journal of Education and Literacy Studies, 9*(4), 93-102. https://doi.org/10.7575/aiac.ijels.v.9n.4p.93
- Currie, D. H., & Kelley, D. M. (2021). Critical social literacy: Media engagement as an exercise of power. *Review of Education, Pedagogy, and Cultural Studies*, 1-41. https://doi.org/10.1080/10714413.2021.1941551
- Darmawansah, & Indartono, S. (2019). The influence of instructional syntax to engage EFL students in online learning environment. *Indonesian Journal of English Language Teaching and Applied Linguistics, 4*(1), 121-132. https://doi.org/10.21093/ijeltal.v4i1.337
- Daud, M. Y., Khalid, F., Ahmad, M., Rahman, M. J. A., & Karim, A. A. (2016). To participate or not? Identifying the factors affecting university students' participation in an e-forum. *Creative Education*, 7(18), 2791-2802. https://doi.org/10.4236/ce.2016.718259
- Daymon, C., & Holoway, I. (2002). *Qualitative research methods in public relations and marketing communications*. Routledge.
- Ensher, E., Heun, C., & Blanchard, A. (2003). Online mentoring and computer mediated support: New directions in research. *Journal of Vocational Behavior*, *63*(2), 264-288. https://doi.org/10.1016/S0001-8791(03)00044-7
- Farizka, N. M., Santihastuti, A., & Suharjito, B. (2020). Students' learning engagement in writing class: A task-based learning. *Journal of English Language Teaching and Linguistics*, *5*(2), 203-212.
- Gerbric, P. (2005). Chinese learners and computer mediated communication: Balancing culture, technology, and pedagogy. In H. Goss (Ed.), *Proceedings of the 22nd Annual Australian Society for Computers in Learning in Tertiary Education Conference* (pp. 241-251).
- Glass, N., & Walter, R. (2000). An experience of peer mentoring with student nurses: Enhancement of personal and professional growth. *Journal of Nursing Education, 39*(4), 1-6. https://doi.org/10.3928/0148-4834-20000401-05
- Gorsky, P., & Caspi, A. (2005). Dialogue: A theoretical framework for distance education instructional systems. *British Journal of Educational Technology, 36*(2), 137-144. https://doi.org/10.1111/j.1467-8535.2005. 00448.x

- Grundy, S. (1991). Which way towards 2000? Contrastive rhetoric in the policy documents of two educational systems [Paper presentation]. The Annual Conference of the Australian Association for Research in Education
- Hamdan, N. A., Mohamad, M., & Shaharuddin, S. (2017). Hypermedia reading materials: Undergraduate perceptions and features affecting their reading comprehension. *Electronic Journal of e-Learning, 15*(2), 116-125.
- Hew, K. F. (2015). Student perceptions of peer versus instructor facilitation of asynchronous online discussions: Further findings from three cases. *Instructional Science*, *43*(1), 19-38. https://doi.org/10.1007/s11251-014-9329-2
- Hobbs, R. (2011). The state of media literacy: A response to potter. *Journal of Broadcasting & Electronic Media*, 55(3), 419-430. https://doi.org/10.1080/08838151.2011.597594
- Holmes, K. (2004). *Analysis of asynchronous online discussion using SOLO taxonomy* [Paper presentation]. The Australian Association for Educational Research Annual Conference.
- Inder, S. (2022). Factors influencing student engagement for online courses: A confirmatory factor analysis. *Contemporary Educational Technology, 14*(1), ep336. https://doi.org/10.30935/cedtech/11373
- Jick, T. D. (1979). Mixing qualitative and quantitative methods: Triangulation in action. *Administrative Science Quarterly*, *24*, 602-611. https://doi.org/10.2307/2392366
- Jose, J., & Abidin, M. J. Z. (2016). A pedagogical perspective on promoting English as a foreign language writing through online forum discussions. *English Language Teaching*, *9*(2), 84-101. https://doi.org/10.5539/elt.v9n2p84
- Kadagidze, L. (2014). The role of forums in online instruction. European Scientific Journal, 1(I), 256-263.
- Kaupmees, H. (2015). *Students' perceptions of and attitudes toward using blogging in upper intermediate EFL classes* [Unpublished master's thesis]. University of Tartu.
- Kellner, D., & Share, J. (2005). Toward critical media literacy: Core concepts, debates, organizations, and policy. *Discourse: Studies in the Cultural Politics of Education, 26*(3), 369-386. https://doi.org/10.1080/01596300500200169
- Kellner, D., & Share, J. (2007). Critical media literacy: Crucial policy choices for a twenty-first-century democracy. *Policy Futures in Education*, *5*(1), 59-69. https://doi.org/10.2304/pfie.2007.5.1.59
- Kersch, D., & Lesley, M. (2019). Hosting ad healing: A framework for critical media literacy pedagogy. *Journal of Media Literacy Education*, *11*(3), 37-48. https://doi.org/10.23860/JMLE-2019-11-3-4
- Khalid, F. (2019). Students' identities and its relationships with their engagement in an online learning community. *International Journal: Emerging Technologies in Learning*, *14*(5), 4-19. https://doi.org/10.3991/ijet.v14i05.8196
- Ko, S., & Rossen, S. (2001). *Teaching online: A practical guide*. Houghton Mifflin.
- Levine, S. J. (2007). The online discussion board. *New Directions for Adult and Continuing Education, 113*, 67-74. https://doi.org/10.1002/ace.248
- Lieberman, A. (1995). Practices that support teacher development. Phi Delta Kappan, 76(8), 591-596.
- Lim, S. S., & Tan, K. R. (2020). Front liners fighting fake news: Global perspectives on mobilizing young people as media literacy advocates. *Journal of Children and Media, 14*(4), 529-535. https://doi.org/10.1080/17482798.2020.1827817
- Lincoln, Y. S., & Guba, E. G. (1985). Naturalistic inquiry. SAGE. https://doi.org/10.1016/0147-1767(85)90062-8
- Mailizar, M., Umam, K., & Elisa, E. (2022). The impact of digital literacy and social presence on teachers' acceptance of online professional development. *Contemporary Educational Technology, 14*(4), ep384. https://doi.org/10.30935/cedtech/12329
- Manca, S. (2020). Snapping, pinning, liking or texting: Investigating social media in higher education beyond facebook. *The Internet and Higher Education, 44*, 100707. https://doi.org/10.1016/j.iheduc.2019.100707
- Mazzolini, M., & Maddison, S. (2005). When to jump in: The role of the instructor in online discussion forums. *Computers and Educations Journal, 49*(2), 193-213. https://doi.org/10.1016/j.compedu.2005.06.011
- McAnulty, J. (2020). Preservice teachers' perceptions of teaching news media literacy. *Social Studies Research and Practice*, *15*(1), 97-113. https://doi.org/10.1108/SSRP-11-2019-0054
- Mukhtar, S., & Putri, K.Y.S. (2021). Technology integrated on media literacy in economic studies on higher education. *Journal of Social Studies Education Research*, *12*(1), 95-123.

- Nielsen, B. (2013). Students' perceptions and learning outcomes of online writing using discussion board. *The JALT CALL Journal*, *9*(2), 131-147. https://doi.org/10.29140/jaltcall.v9n2.152
- Nurjanah, R. L., & Pratama, M. R. A. (2020). Self-regulated learning strategy instructions in reading comprehension skill learning during outbreak era. *Journal of English Language Teaching and Linguistics*, 5(2), 191-201. https://doi.org/10.21462/jeltl.v5i2.409
- Omar, A., Amir, Z., & Mohamad, M. (2018). Facilitating online learning: Students' online discussion strategies for a project work at a technical university in Malaysia. *3L: The Southeast Asian Journal of English Language Studies*, *24*(4), 102-114. http://doi.org/10.17576/3L-2018-2404-08
- Ozdemir, E., & Aydin, S. (2015). The effects of blogging on EFL writing achievement. *Procedia–Social and Behavioral Sciences*, 199, 372-380. https://doi.org/10.1016/j.sbspro.2015.07.521
- Rido, A., & Sari, F. M. (2018). Characteristics of classroom interaction of English language teachers in Indonesia and Malaysia. *International Journal of Language Education*, *2*(1), 40-50. https://doi.org/10.26858/ijole.v2i1.5246
- Rovai, A. P. (2007). Facilitating online discussions effectively. *The Internet and Higher Education, 10,* 77-88. https://doi.org/10.1016/j.iheduc.2006.10.001
- Sari, F. M. (2020). Exploring English learners' engagement and their roles in the online language courses. Journal of English Language Teaching and Linguistics, 5(3), 349-361. https://doi.org/10.21462/jeltl.v5i3.446
- Sari, F. M., & Putri, S. N. (2019). Academic WhatsApp group: Expressing students' experiences in writing class. *Teknosastik: Jurnal Bahasa dan Sastra* [*Technosastic: Journal of Language and Literature*], 17(2), 56-65. https://doi.org/10.33365/ts.v17i2.324
- Sari, F. M., & Wahyudin, A. Y. (2019). Undergraduate students' perceptions toward blended learning through instagram in English for business class. *International Journal of Language Education*, *3*(1), 64-73. https://doi.org/10.26858/ijole.v1i1.7064
- Saunders, M., Lewis, P., & Thornhill, A. (2009). Research methods for business students. Pearson.
- Suler, J. (2004). In class and online: Using discussion boards in teaching. *CyberPsychology and Behavior*, *7*(4), 395-401. https://doi.org/10.1089/cpb.2004.7.395
- Sun, Z. Lin, C., Wu, M., Zhou, J., & Luo, L. (2017). A tale of two communication tools: Discussion-forum and mobile instant-messaging apps in collaborative learning. *British Journal of Educational Technology, 49*(2), 248-261. https://doi.org/10.1111/bjet.12571
- Tagg, C., & Seargeant, P. (2019). Context design and critical language/media awareness: Implications for a social digital literacies education. *Linguistics and Education*, *62*, 100776. https://doi.org/10.1016/j.linged.2019.100776
- Terehoff, I. (2002). Elements of adult learning in teacher professional development. *NASSP Bulletin, 86*, 65-77. https://doi.org/10.1177/019263650208663207
- Warsah, I., Morganna, R., Uyun, M., Hamengkubuwono, & Afandi, M. (2021). The impact of collaborative learning on learners' critical thinking skills. *International Journal of Instruction*, *14*(2), 443-460. https://doi.org/10.29333/iji.2021.14225a
- Wiersma, W. (1986). Research methods in education: An introduction. Allyn and Bacon.

