

DIGITAL MULTIMODAL LITERACY MODEL OF ENGLISH LANGUAGE EDUCATION IN INDONESIAN HIGHER EDUCATION

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Abstract: This research aims to (1) examine student and lecturer perceptions regarding the importance of digital multimodal literacy, and (2) to find out best practices of integrating digital multimodal literacy in teaching English language skills. This research involved sixty students and 7 lecturers from two study programs in 2 universities who used to apply multimodal texts in developing multiliteracy at an Indonesian tertiary level. This research design incorporated both quantitative and qualitative involving a survey and focus group discussion approach. The study reveals that students and lecturers had a very good perception of the utilization of digital multimodality in in teaching English language skills.

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Several best practices of Digital Multimodal literacy in in teaching English language skills is also identified.

Keywords: *digital, higher education, multimodal, literacy, English language skill*

INTRODUCTION

To prepare the future digital generation, reading skills have changed from being text-based only to multimodal reading skills (Jewitt, 2005, 2008). The ability to search for information from new technology, such as finding, selecting and processing information from the internet, is a certainty. The current learning environment is surrounded by multimodal information sources where the acquisition of meaning and information can come from various semiotic systems such as audio, visual, video and others. In this case, the younger generation, who are often called the digital generation or digital natives (Prensky, 2001), are starting to get used to expressing their ideas and meanings through digital multimodal technology such as video and other media (Mills and Unsworth, 2018; Lim & Toh, 2020). Many things now contain semiotic technology to create meaning or meaning making (Lim, 2021; Van Leeuwen et al., 2013). Professor John Potter and Julian McDougall, experts in the field of digital media and education, stated that young people today have a tendency to read a lot of multimodal digital technology works, which is characterized by the large amount of time they spend reading social media on their cellphones (Potter & McDougall, 2017, p 20). In this regard, meaning-making using language and other multimodal sources has become commonplace today. We are used to intuitively looking for eye-catching text and interesting images and focusing on interesting posts. At the same time, existing applications allow us to post photos and videos and edit other things to show our digital selves on social media platforms.

With the conditions of this multimodal digital environment, learning to read can no longer only refer to one source of meaning making from linguistics or language, namely text, and needs to involve multimodal sources of meaning such as audio, visual video and others

(Serafini, 2013). Reading skills are not only based on printed texts but also based on computer screens (viewing multimodal texts). This condition encouraged the existence of the New London Group Movement which opposed language-based literacy alone and proposed the concept of *multiliteracy* (differences in context and communication patterns) and *multimodality* which refers to the existence of various sources of meaning from image, sound, gestures, animation, and others (Cope & Kalantzis, 2015, 2021). In this context, language learning is not just pure language learning but also involves various sources of meaning that involve diverse social and cultural contexts. In the context of language learning, the term *viewing* is introduced for reading and listening and the term *representing* for productive writing and speaking skills, and lecturers or teachers are asked to improve and hone students' abilities in understanding various semiotic systems or sources of meaning with the presence of cohesive and coherent multimodal texts.

Research in the multimodal field demonstrates that multimodal teaching can develop critical thinking skills (O'Halloran et al., 2017). Professor Theo van Leeuwen, a social semiotics expert, found that the accessibility of digital technology such as Word and PowerPoint software has made multimodal text designs able to be created and accessed by anyone so that "multimodal literacy has become a work skill and a life skill" (van Leeuwen, 2017, p 18). In this case, multimodal literacy must be a '*critical literacy*' that can guide students in recognizing the values in semiotic technology. The challenge for educators today is to identify '*critical competencies*' and include them in the curriculum as part of literacy development (Lim et al., 2020; Weninger, 2019) and also develop pedagogy to teach multimodal literacy, including teaching strategies, teaching resources and teachers' reflections in carrying out these multimodal literacy development activities. Teachers are required to be able to choose relevant tools or materials and reflect on the use of various material sources (Kress, 2010; Kress & Selander, 2012).

Finally, multiliteracies or multimodal integration in language teaching will not be possible in the classroom if it does not prioritize

adaptation to context and people (Cohen et al., 2018; Hung et al., 2015; Lim et al., 2019, Sharari et al., 2018). The latest research by Viktor Lim and colleagues in 2022 found that accommodation for multiliteracy and multimodal teaching in secondary school classes in Singapore requires the perseverance and technological ability of teachers and students to continue to collaborate to create good lesson plans that fit the theoretical framework and have value. practical use in developing students' viewing and representing abilities in multimodal texts.

In Indonesia, Al Fajri (2020) conveyed the importance of a multimodal approach in general. Not much is known about the perceptions of teachers and learners regarding the nature of multimodal literacy and how they develop it in the classroom and outside the classroom, and what kinds of designs are for integrating multimodal literacy in foreign language learning in Indonesia. This research addresses the nature of multimodal literacy as to obtain a general overview of the profile of multimodal literacy teaching and learning as well as optimization strategies or models that can be developed in the future. Siagian and Sihombing (2022) researched the use of multimodal in Indonesian language classes and found that multimodal learning can be carried out and can accommodate students' varied backgrounds, especially in their learning strategies. Kayati (2022) also stated that students' understanding of multimodal texts is still very worrying and requires further attention from researchers.

The aim in developing strategies and models for lesson packages or courses in this research is to offer examples of instructional strategies that have a theoretical basis and are oriented towards best practice in developing multimodal literacy systematically. The lessons developed are aimed at providing inspiration for teachers, educators, and as material for reflection regarding student profiles, needs and interests. Lecturers are encouraged to prioritize existing principles, ideas and strategies in developing multimodal literacy. All lesson ideas produced driven by theory and best practice.

Based on the description above, the research problems to be studied are as follows:

1. What are students' perceptions regarding digital multimodal literacy?
2. What are lecturers' perceptions regarding digital multimodal literacy?
3. What are the best designs or strategies for integrating multimodal literacy in in teaching English language skills?

METHOD

Research Design

The study involves both quantitative and qualitative design by employing survey in eliciting teachers' and students' perception (research question 1 & 2), and qualitative in dealing with eliciting in depth information regarding strategies in incorporating multimodality in EFL classroom through interview and focused group discussion (research question 3). This research involves a quantitative approach with a survey study design to investigate the relationship between two or more variables (Creswell, 2014). Meanwhile, the design-based research (DBR) research and development method by Cavallaro and Sembiente (2021) was used to answer the third question.

Research Participants

This study chose 2 (two) research loci, namely one state university in Malang and one state university in Surabaya. These two study programs are superior and under public legal entity state university (PTNBH) category reflecting that the quality of learning is very good. This research involved sixty (n=60) 3rd semester students and above to find out their experiences developing their multimodal literacy skills, and lecturers who strengthen MK language skills. So, the total number of respondents and subjects for this research was 60 students and 7 lecturers.

Research Procedures

The development model in this study referred to Cavallaro and Sembiente (2021) framework. It involves: (1) Needs Analysis covering an analysis of the perceptions and beliefs of lecturers and students

regarding the nature and development of digital multimodal literacy; (2) conducting interviews and Focus Group Discussions (FGDs) with lecturers regarding the practice of integrating digital multimodal literacy in teaching in language classes and what the challenges are or how effective the implementation is; (3) designing a digital multimodal literacy integration model or strategy which contains strategies, lesson plan models and digital multimodal material sources. Based on the results of the needs analysis and theoretical review as well as the author's previous research, a model for developing digital multimodal literacy materials was then prepared to support the cultivation of multimodal literacy in higher education.

Data Collection

The process of data collection involved several research stages, such as (a) survey students and lecturers regarding their experiences of developing multimodal literacy skills as to find out their experiences and views regarding the importance of developing multimodal literacy that has been carried out in the classroom, (b) semi-structured interviews related to teaching practices that have been carried out in foreign language classes in improving multimodal literacy skills, and also need analysis regarding the determining factors for increasing success in improving multimodal literacy skills carried out through direct and online interviews with lecturers (Ruhaena, 2013), (c) focus group discussion with lecturers.

Data Analysis

The results of the survey taken from students were calculated in frequency and percentage to determine the general pattern of perceptions of multimodal literacy in the classroom. These results were then followed up with discussion together with the lecturer in the FGD. In this forum, lecturers shared ideas for overcoming problems and best practices for digital multimodal integration into language courses and what kind of lesson plan models are appropriate, perhaps referring to the Learning by Design Framework proposed by Cope and Kalantzis (2015, 2021), and Lim et al. (2022). The results of the FGD were recorded

and analyzed descriptively to produce outputs in the form of a multimodal literacy development model design and preparation of digital literacy materials in higher education.

FINDINGS

This research seeks to answer three research problem formulations, namely (1) what are students' perceptions regarding digital multimodal literacy?, (2) what are lecturers' perceptions regarding digital multimodal literacy?, and (3) what are the best designs or strategies for integrating multimodal literacy in in teaching English language skills?. The main findings of this study are depicted as follows.

Students’ Perceptions of the Implementation of Digital Multimodal Literacy

Table 1 demonstrates data that almost all students show a good perception of the application of foreign language learning with the application of multimodal literacy.

Table 1.
Student Perceptions of the Implementation of Digital Multimodal Literacy

No	Statement	Agree	Disagree
1	The multimodality literacy introduced in the class session was quite helpful for me in understanding the lesson	100%	0%
2	I'm interested to know more about multimodality	97.1%	2.9%
3	I became more interested after being introduced to multimodality in class	90.9%	9.1%
4	I have become more aware of the multimodality used in the classroom	100%	0%
5	I learned a lot from the multimodalities discussed	100%	0%

Data analysis was carried out in the form of descriptive statistics obtained from the average responses from participants both on each factor and on the total perception of the participants. The interpretation for scores or values can be seen from Table 2.

Table 2.
Classification of descriptive statistical values

Interval	Classification
0 –20%	Very bad
21 –40%	Not good
41 –60%	Enough
61 –80%	Good
81 –100%	Very good

The result of this study revealed that students' perceptions of the application of multimodal learning at both universities were in a very good interval classification with an average score in the interval of 81-100%. This shows that the multimodal literacy learning has been well-practiced by lecturers and well received by students.

In accordance with the mixed method design, in-depth interviews were conducted to confirm respondents' answers to the random questionnaire results and to obtain further information about students' perceptions of the implementation of multimodal literacy learning. The interview results show some additional information that multimodal literacy-based learning makes students (1) better understand the content presented by the lecturer, (2) more enthusiastic about learning and (3) more creative in learning process. The information at the in-depth interview stage is very useful to complement the findings in the questionnaire results.

One respondent said that multimodal literacy-based learning really facilitated him in having a better understanding of the reading he/she read. The availability of text accompanied by images makes it much better to understand the message the author wants to convey. Content units that have been prepared by lecturers accompanied by rich and varied multimodal literacy practices provide students with many opportunities to explore and provide students with a deeper understanding of the reading content to be conveyed. DA and RD students further explained:

Student DA:

“Multimodal classes allow me to understand texts more clearly and understand better because for example the exposure to sophisticated historical concepts through multimodal engagement will feel real.”

Student RD:

"In my phonology class, my lecturer plays videos about the material and sometimes songs and film analysis to study phonology. We feel that it is very helpful for projects and assignments that have an element of digitization because it really makes us understand more quickly."

Apart from providing greater understanding, multimodal literacy teaching also made students more enthusiastic about learning. This is as stated by the following student:

Student RS:

"I got a project assignment in an applied linguistics class, where this class project really integrates multimodality into its work. We learned a lot of things and became more enthusiastic about working on it because our projects felt more alive with the help of additional visual and audio videos making our work more interesting."

Apart from making students more enthusiastic about multimodal learning, it could make students more creative in carrying out assignments given by the lecturer. This was expressed by the following student TR:

Student TR:

"My lecturer in a critical reading class assigned us students to work together to create a booklet and newspaper that included images and text-based facts and report them as if they were reporters of an existing issue. We really enjoyed it because we were able to better understand how critical it is to process text, how we as readers must be critical of our daily reading material so we won't fall for hoaxes or fake news."

Student DRS further explained:

Student DRS:

"The lecturer also asked us to record audio of their verbal descriptions describing the events of the Ukrainian war. Then we were asked to make flyers calling for peace and videos of love and peace. We uploaded it on our media and many people liked it and hopefully our

work can inspire and the message can be conveyed. Multimodal-based literacy learning does not make our classes monotonous."

In short, students found that multimodal literacy learning brought many advantages in facilitating their learning and making students more engaged in the EFL classroom.

Lecturers' Perceptions of the Implementation of Digital Multimodal Literacy

Table 3.
Lecturer questionnaire results

No	Statement	Agree	Disagree
1	Multimodal literacy in understanding lessons easily	100%	0%
2	I'm interested in implementing more about multimodality	97.1%	2.9%
3	My students are more enthusiastic about learning after being introduced to multimodal literacy in class	90.9%	9.1%
4	I have become more aware of the use of multimodal aspects in teaching	100%	0%
5	I learned a lot from other lecturers about how to apply multimodality	100%	0%

The results of the questionnaire as in Table 3 showed that lecturers had a positive perception of the implementation of multimodal literacy carried out at the two universities. Descriptive statistical analysis showed that the perception value in the interval figures was very good. Data analysis was carried out in the form of descriptive statistics obtained from the average responses from participants both on each factor and on the total perception of the participants.

Referring to score analysis in Table 2, it was found that the lecturers' perceptions were in the 81-100% interval, which shows that the lecturers had an extraordinarily good perception of multimodal literacy learning practices in the classroom. To get more detailed results on the questionnaire responses, in-depth interviews were conducted with lecturers who practice multimodal literacy learning.

The results of in-depth interviews revealed several findings related to this multimodal learning practice. Lecturers said that this practice really helped them provide a clearer and more comprehensible lecture content. The information technology helps lecturers to bring into class. This was expressed by the participant lecturer as follows:

Lecturer A:

"Honestly, compared to the past, now technology really helps us because learning is not always based on monochrome text but is more varied, the children don't get bored. The lecturer is happy that they are smart."

Lecturer B expressed the similar thought particularly in the enthusiasm in bringing multimodality into the EFL classroom.

Lecturer B:

"Text now comes in many forms, it doesn't have to be words, video and audio as well as pictures, so students, especially generation Z, understand it more easily and we lecturers are really helped in synchronizing learning."

Apart from helping lecturers in delivering lesson material, multimodal-based learning also makes students more creative. This can be seen in the following interview excerpt:

Lecturer C:

"I often feel amazed at Gen Z students now, when they are given multi-modal assignments, they are incredibly creative and even do more than they expected. This of course makes me happy."

The same thing was also expressed by lecturer C who said that students are now much more technologically savvy or literate, and this technology has a plus point because they can be very creative with the projects they provide.

Lecturer F:

"Today's children have extraordinary ideas, perhaps one of them is supported by some of our advanced technological facilities so that we

no longer get monotonous assignment or project results. The project assignments are interesting and not monotonous, there are videos, there are visuals, there are static and moving images and everything can be shared easily."

In summary, the lecturers have been familiar with multimodal language teaching and have incorporated multimodality into the EFL classroom.

Best Practices Model of Digital Multimodal Literacy

To find best practices for multimodal literacy practices, a focus group discussion was held at two universities. This FGD succeeded in uncovering several examples of best practice models in multimodal literacy learning in the classroom. This FGD activity focused on several main discussion points including (1) the form of multimodality used, (2) activities carried out in multimodality-based learning, (3) steps for guiding students, (4) supervision in learning, (5) duration or length of practice multimodal, and (6) standards of success in multimodality-based teaching and learning. The results of the FGD as accompanied by in-depth interviews revealed various kinds of multimodal language teaching practices as follows.

Multimodal learning form

In general, the modes used by lecturers in teaching use all forms of text modes in three categories: 1) written language 2) visual images (photography, paintings, graphs, pictures and charts), and 3) design features. The instructional approach taken by lecturers which aims to develop students' multimodal literacy does not only focus on individual perceptual and cognitive abilities but also on how the visual images and texts they observe and use relate to socio-cultural and societal values. Apart from that, lecturers also strive to ensure that the multimodal literacy used can reveal hidden meanings and how meanings are formed when these symbol systems interact with each other. Various modes are used in learning to achieve learning goals and can accommodate various learning needs that are tailored to the

learner's character. This was expressed by one of the lecturers as follows.

Lecturer A:

"Yes, we use all multimodal forms (text, audio visuals, and images). Sometimes Mrs. D uses the Padlet application, providing videos, game applications, so that all modes can be entered."

Lecturer D:

"I use a learning platform that accommodates the use of multimodality so I hope that by including more than one mode it will accommodate each student's learning style to enrich student understanding."

Lecturer E:

"I learn using multimodality in grammar in discourse class and Discourse Analysis class. For example, looking for texts from books and corpora so that they compare textual and semiotic concepts from concepts that they really understand."

Providing various forms of multimodal teaching is also carried out in order to provide a variety of learning modes so that they are not monotonous and boring. Lecturer F expressed this as follows:

Lecturer F:

"I use Google Classroom, Google Meeting and Flip in speaking course because it requires using several digital platforms for anticipate class vacancies and to provide a variety of class activities so it's not boring"

Lecturers also use multimodal media to apply intellectuality. For example, when a lecturer provides a text about global environmental issues (for example the issue of global warming) accompanied by pictures and videos, the lecturer hopes that students can learn more deeply about the message they want to convey, so that they are not only expected to be able to answer questions in the text but also be able to reveal the purpose of the message more. From this text, for example, the lecturer can make students think more critically, that it is not just a text but also a warning and requires our joint action to be

able to overcome it. Follow-up projects on reading texts with the theme of global warming can be followed up by providing follow-up projects, for example an environmental campaign to prevent global warming via social media. This was expressed by lecturer B as follows:

Lecturer B:

"I use various multimodal modes, especially during reading lessons which are said to be monotonous. For me, when lecturers can be creative with a variety of multimodal modes of learning to read, it will be interesting because we can move beyond just students being able to read and answer questions but more into the contextuality. For example, when discussing the issue of global warming, we invite students to think critically about the fact that this text not only requires their effort to read, but can also invite them to become inventors of solutions to common problems."

In this FGD, the lecturer also showed how multimodal literacy learning has also been incorporated into the LMS (Learning Management System) of both campuses. LMS allowed lecturers to bring many multimodal materials into the system.

LMS at both universities, specifically in the cultural sciences faculty, is used as a learning tool for strategic and planned multimodal literacy applications. One lecturer from Surabaya said the following:

Lecturer E:

"There is an LMS called UNAIR Hebat. Basically, we use that because the system accommodates the 3 existing aspects. In terms of direction, there is also an assessment. secondly, we oblige to fill the Great. So even though there are offline classes, at least our Great UNAIR can't be empty. So from there, I personally use it especially for assignments. for example, listening class, and at the beginning I have to tell the students, maybe only 20% of the lessons in class will help you practice, especially for students in the first semester, they have to push. So, I give them activities outside of class but I still monitor them, there is monitoring for those activities. they have a learning log for sites that are good for learning listening. they learn outside, get feedback in class. not all students, I'm just random. This week I told them to read and I pointed, asked them to show me good

sites and asked them what they learned, what topics, and which ones to recommend/not recommend with reasons. then there is a point of learning that they must prepare. the variety is amazing. Finally, they exchanged websites, and at the same time I also made a list of websites whose material was good enough and whether the level of difficulty was suitable for students or not."

Not just at this Surabaya institution, but also at one of the state universities in Malang, where the LMS system created there enabled the *brone* platform, an integrated LMS system that allows instructors to deliver assignments online. *Brone* can help with online homework for pupils. Lecturer B went on to say:

Lecturer B:

"I have directed them to search for their own texts directly from the internet, I also asked them to search in journals, etc. for example, a topic about paragraph text. It's up to you where you get the paragraph. If it comes from a magazine or newspaper, the challenge is that the paragraph format is not good, then you will have difficulty finding the main idea. I recommend the book. Now there's a lot of access, like ebooks, and that also depends on the theme, then for books, for example I ask for them from journals, and the results are all uploaded via brone."

Multimodal Literacy Activities

Several multimodal activities that lecturers used to help students learn in class were also disclosed in this focus group discussion. Asking students to do learning projects is one of the most popular methods. Project-based learning (PjBL) is a teaching approach that enhances communication abilities and promotes critical thinking. It motivates students and helps them develop their problem-solving and reasoning abilities while encouraging them to broaden their thinking through real-world project-based learning. An example of a project-based learning activity design provided by lecturers generally is shown on Figure 1.

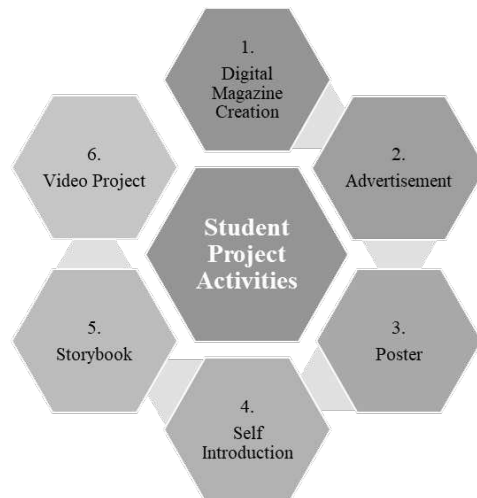


Figure 1. *Student Project Activities*

Apart from the above stages, the discussion reveals that some of teaching activities referring to one of the following best practices.

First is educational games. Educational games in teaching and learning can invite students to use many modes at once. Words, colors, movements, images, speech, music and actions that require writing can also be used as a medium for conveying learning messages. When using educational games, students can learn in the classroom and outside the classroom.

Next is Think-pair-share, which is a collaborative learning strategy that can increase students' understanding of the material, collaborate, as well as communicate ideas. This activity has three steps, namely think or giving students the opportunity to think about the subject matter individually. The second step is pairing, namely pairs to discuss their ideas or findings during the think activity. Collaborative activities on think-pair-share (TPS) are also needed.

Other activities is Case-based learning, namely learning that takes real-life cases as teaching material. This learning will enable students to enrich information in various ways, such as observation, interviews, reading, listening and taking notes related to teaching materials. In this activity, the teacher facilitates class discussions regarding the cases being discussed and ensures that students are able to relate them to the material and the teaching materials. The

advantage of this method is that it gives students confidence that what they are learning is useful and meaningful in the real world, so that students' learning activities can increase if their learning attitudes and motivation also increase.

The other strategy is personal journal entries, such activities that give students the opportunity to enter the learning material they receive using their own words. To make it multimodal learning, teachers can advise them to explore their personal journals in various media. For example, they can enter it in the form of written notes, charts, illustrations, podcasts, stories, even videos.

Multimodal Learning Model

Based on the results of analysis of the collected data, it was found out that all lecturers as the research subjects also implemented the four stages of multimodal learning process by referring to the learning theory and learning by design framework proposed by Cope & Kalantzis (2021). In more detail, the framework and design proposed by Kalantzis and Cope (2021) is in Figure 2.

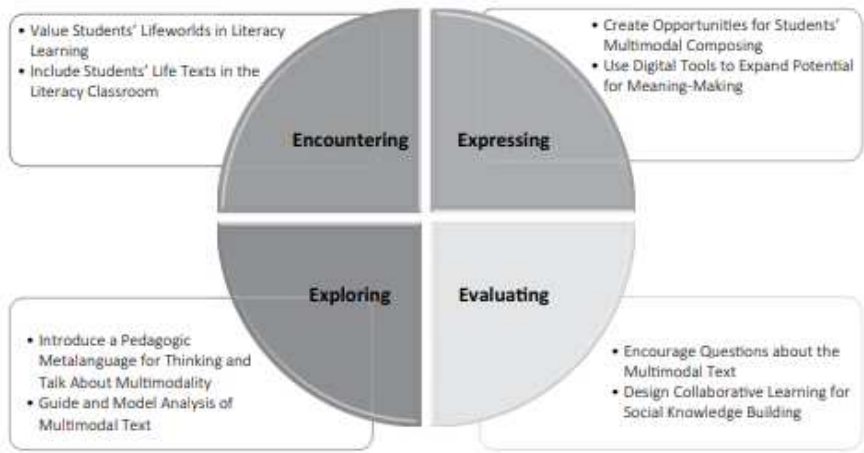


Figure 2. *Four phases of the multimodal learning process*

The discussion with lecturers reveals several principles in integrating multimodality in the EFL classroom. First, students should be introduced with relevant topics, and prior to class session they are

required to search for that topic from any resources like in website, books, YouTube, and other relevant sources. Second, students would then be requested to present several key words and facts or evidence about the topics. Afterward, lecturers would highlight the important key words and ideas as well as evidence /argument surrounding the topics. Third, lecturers would bring multimodal digital texts requiring learners to work in pair or group to identify the main message carried out by the multimodal digital texts. Fourth, in group works they are required to produce similar written multimodal texts by referring to their discussion and understanding about topics before EFL classroom started. Lastly, lecturers and students discussed reflectively about the meaning-making processes during multimodal reading and writing processes.

DISCUSSION

The main finding of the study is that both students and lecturers are of getting benefits from multimodal language learning and teaching. Both parties perceived above 97% of benefits in multimodal based language teaching and learning, suggesting that students can maximize their learning from learning resources provided containing various semiotic meaning resources such as text, audio, visual, video and others. Meanwhile, teachers are able to maximize their teaching materials by utilizing multimodal resources to enable students comprehend easier the subject taught.

The results of this research reveal the fact that multimodal literacy is implemented by both universities perceived well by the students as they show good perception over its implementation. They think that this can help them to understand the subject of the course they are taking well and help them to be more creative. They said that the tasks given by implementing multimodal literacy helps them a lot to be independent learners. This is in line with the opinion of Oldakowski (2014) who also learned that the use of multimodal assignments and discovered that doing so not only helped students show what they were thinking, but also helped them make better decisions and have deeper understandings of the material's content.

Next, finding also revealed that the students also said that multimodal tasks help them improving their creativity and this is in

line with Ekşi and Yakışık (2015) stating that multimodal texts encourage students to employ their cognitive abilities and boost their creativity, focus, participation, and output. Students state that perception that multimodality facilitate their EFL learning can be explained with the evidence that gen Z generation has been surrounded by digital and technology or popularly known as digital native (Prensky, 2001). The digital era has pushed young generation to be able to catch the information carried out by many various modes of meaning. Their surrounding information has been widely carried out by various meaning making process and they have to continuously learn about image-text relation (Liang and Lim, 2020; Unsworth and Mills, 2020)

From teachers' perspectives, learning materials can be put into maximum to cater students with various background by bringing any semiotic resources (visual, gestural, spatial, linguistic, and others) for meaning making resources in the EFL classroom. Lecturers are demanded to provide different types of texts (Kress et al., 2005), multimodal texts created with different semiotic modes, such as print, speech, gestures, writing, media (video and audio), charts, graphs, pictures, realia – carrying central elements of meaning-making (Lim, 2018). Lecturers could also provide an opportunity for students to explore and generate the information from multimodal resources so that in turn students could develop their sense of semiotic awareness in this digital communication era (Towndrow et al., 2013). Towndrow and Kogut (2021) investigated how secondary students' engagement with semiotic activity and heightened feeling of multimodal semiotic awareness might be fostered through the construction of multimodal representations. Opportunities for students to perform and explore ideas and identities using a variety of tools that help them make meaning is another aspect of multimodal pedagogies (Lim, Towndrow & Tan, 2021). Moreover, consistent with research results from Asian studies (Ganapathy & Seetharam, 2016; Anderson et al., 2017; Chen, 2021), the teachers showed proficiency in creating learning activities that promoted students' multimodal literacy development in the classroom by skillfully utilizing multimodal representations (Bezemer & Kress, 2016). Teachers could be encouraged not only to share teaching ideas and resources as a community, but also to develop

communities of practice, innovating and experimenting with a diverse repertoire of pedagogies (Pang et al., 2015; Sharari et al., 2018). Furthermore, teachers of EFL students in classrooms also felt positively about the implementation. It was stated that kids grow in self-assurance and take greater responsibility for their actions in the classroom and completed assignments. This corresponds with the duties of teachers and students are changed when multimodal texts are used in language skill courses, in addition to the way that teaching is delivered, assessed, and students participate in the course (Walsh, 2010).

Project based learning was observed in this study as one of the main findings in classroom used to cultivate multimodal literacy in the EFL classroom. Ioannou et al (2016) found that multimodal learning environment can facilitate the problem-based teaching and learning process. Giving students the chance to create meaning through several modalities is crucial because it can positively impact their development of critical thinking, empathy, and even confidence (Jiang and Guo, 2020).

This study also reveals some principles about delivering or incorporating multimodal texts into classroom by general searching for the topic, learning and comprehending the topic (digital viewing) from theoretical perspective, evaluating the issues or argument around the topics and generating information or digital composing or representing. These principles proposed by lecturers in this study is aligned with what was proposed by multimodal scholars, Kalantzis and Cope (2021) that learning by design framework covers encountering, exploring, evaluating, and expressing stage. The practice of multimodal practices found in this study cannot be generalizable to all teachers in Indonesia. Further research could be undertaken to explore the nature of the teachers' multimodal pedagogies across a wider range of schools, universities in Indonesia and around the world.

CONCLUSION

This research seeks to find out lecturers' perceptions regarding digital multimodal literacy, the way lecturers teach digital multimodal

literacy skills in foreign language classes and the design or strategy for integrating multimodal literacy in foreign language classroom learning.

The findings show that students and lecturers show a good perception of the application of foreign language learning with the application of multimodal literacy. There are some ways of teaching multimodal literacies in both universities and mostly LMS (Learning management System) is used. After that, each teacher uses a unique technique to accomplish their objectives. As a result, scholars understand how critical reflection is for educators who use a variety of instructional strategies in the classroom. The integration of experience with reflection and theory with practice, is greatly responsible for the formation of a reflective practice discourse

Both teachers and students are all happy with the implementation of multimodality in EFL classroom in an Indonesian tertiary context. However, to provide more impacts for long run, as numerous Asian studies, like Tan et al. (2019), Nabhan and Hidayat (2019), and Bautista and Gutierrez (2020), have shown, professional development for teachers is still essential to implementing multimodal digital instruction. Explicit instruction on how to comprehend multimodal texts is another option to cultivate multimodal literacy.

Meanwhile, the limitation of this study is that the sample is too small and limited to university students. Further studies can explore the nature of multimodality from various background of education levels in Indonesia.

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DECLARATION OF AI AND AI-ASSISTED TECHNOLOGIES

During the preparation of this work, the authors used ChatGPT for optimizing language and readability. The authors have reviewed and edited the content as needed and take full responsibility for the

content of the publication after the use of this tool/service. This declaration is made in accordance with the journal's guidelines regarding the use of artificial intelligence and AI-assisted technologies in academic writing. We confirm that: 1) The AI tool was used solely for language enhancement and readability improvement, 2) No original research data, analysis, or scientific conclusions were generated by AI, 3) All intellectual contributions, research methodology, and scientific interpretations remain entirely the work of the named authors, and 4) The authors have thoroughly reviewed, verified, and take complete responsibility for all content in the manuscript. We believe this transparent disclosure maintains the integrity of our research while acknowledging the technological assistance used in manuscript preparation.

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