Teachers’ orchestration of semiotic resources in EFL classrooms: a multimodal analysis

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Abstract

Teaching is an activity involving semiotic resources beyond verbal language. Therefore, more studies investigating what semiotic resources are employed and how they are utilized within EFL classroom settings are needed. This study sought to explore the types of semiotic resources employed by two EFL teachers in Indonesia and the roles of these semiotic resources in teaching activities. Through a qualitative case study, two EFL teachers in Bandung and Medan, Indonesia, were purposively selected. Data collection was through a semi-structured interview and document analysis. A six-phase of thematic analysis was employed to analyze the interview results, while a three-step of skimming, reading, and interpretation was used to analyze the documents. This study found that spoken language, pictures, videos, proxemics, gestures, head movements, gaze, and music were the semiotic resources used by both teachers in their teaching. The findings also demonstrated that these semiotic resources were used in the opening, delivering, and closing of the class, explaining learning content, managing classroom order, showing appreciation, and conducting evaluations. This study implies the crucial roles of all stakeholders in education to help EFL teachers in multimodal knowledge and practical strategy to create better teaching outcomes.
Introduction

Recent years have witnessed the integration of multimodality in the reported studies of language education worldwide (Kress, 2010; Rowsell & Collier, 2017). The multimodal research topics spread across different areas of teaching and learning, such as the teaching materials (Nabifar & Baghermousavi, 2015), the beliefs and practices of English as foreign language (EFL) students and teachers in multimodality integration (Lim et al., 2022), and the use of semiotic resources in the EFL classroom (Apriani et al., 2021; Pramono, 2019; Qin & Wang, 2021). These studies provide substantial information on the critical role of multimodality in EFL teaching and learning in the age of digital technology.

Integrating multimodality into EFL classrooms is urgent, as students nowadays are digital natives and tend to learn English through various inputs, including auditory, visual, and others (Gargallo-Camarillas & Girón-García, 2016). Similarly, Gilakjani et al. (2011) held that while learners may prefer at least one learning mode, i.e., visual, aural, textual, or kinaesthetic, many of them learn best through combined multimodal resources. Jewitt and Kress (2003) further supported that the students’ capability of consuming, interpreting, and producing multimodal literacies is becoming increasingly significant for academic and social purposes. It means that the various semiotic modes exposed to language learners potentially lead to better learning achievement. Therefore, EFL teachers’ multimodal pedagogy, the skills of selecting and combining various communicative modes in addition to spoken language, holds an important role in supporting effective learning (Morell, 2018).

Language teaching and learning activities offer students a multimodal experience in various ways. For instance, teachers interactively apply semiotic resources to make meanings through language, space, gesture, and distance
(positioning) (Lim, 2021), in addition to other semiotic resources, such as coursebooks, whiteboards, and any digital tools within the classroom. An instance of classroom use of semiotic resources is teachers’ spatial occupation, comprising formal, social, and personal distance (Qin & Wang, 2021). Formal distance refers to the teacher’s position in front of the class, near the desk and whiteboard. When the teacher is standing in the aisle or between the students’ seats, it is called social distance. Lastly, personal distance refers to the situation where the teacher approaches a student to have a personal interaction.

Scholars in multimodal areas have discussed the positive impacts of multimodality on students’ language learning. Ilmi and Dewi (2022) found that multimodality improves English students’ linguistics skills through reflective, imaginative, and higher-order thinking. Moreover, Gilakjani et al. (2011) argued that the combination of words and other semiotic modes, such as pictures, works better than the words used in isolation. They also noted that the teaching instruction integrating animation contributes to students’ engagement, resulting in improved learning performance. Finally, a pilot study by Guichon and McLornan (2008) revealed that multimodal resources, i.e., audio and images, lead to students’ better academic comprehension. Therefore, it can be implied that language learning through multiple senses has a more profound impact compared to learning through one receptive sensor only.

Considering the benefits of multimodal integration in language learning, more studies are needed to provide scientific evidence on how teachers optimize the use of semiotic resources to enhance the learning process and achieve better outcomes. However, previous research delving into classroom discourse and teacher-student interaction tended to focus more on the analysis of one single mode, which is verbal language (Lim, 2021). Only a few researchers have reported on how English teachers utilized semiotic modes or resources in their teaching activities (Apriani et al., 2021; Pramono, 2019; Qin & Wang, 2021; Sukyadi et al., 2016). However, the study by Apriani et al. (2021) did not use documents as the instrument, and the investigation of how semiotic resources were used in the classroom was harvested through questionnaires and interviews. Then, the teachers recruited by Pramono (2019) were considered experienced teachers, given their ten years of teaching duration. Moreover, the participants observed by Qin and Wang (2021) were performing teaching in a demo class, which was most likely different from natural classroom settings. Additionally, Qin and Wang’s (2021) study was in another nation than Indonesia, resulting in the population gap in this area of research. To fill in the gaps identified, the current research aims to investigate the type of semiotic resources used by two novice EFL teachers in their natural settings of English teaching and
how those semiotic resources contribute to the teaching activities. The research questions are as follows:
(1) What semiotic resources are selected and utilized by two EFL teachers during classroom teachings?
(2) What are the roles of those semiotic resources in EFL classroom teachings?

Literature review

Multimodality in EFL teaching and learning in Indonesia

Multimodality refers to the way people communicate using different semiotic modes (Kress & Van Leeuwen, 2020), including verbal and written language, visuals, and gestures (Bull & Anstey, 2010; Danielsson & Selander, 2021). Historically, multimodality has its roots in The New London Group's (1996) manifesto of multiliteracies, and the term multimodal was introduced through the works of Jewitt and Kress (2003), Kress (2010), Kress and Van Leeuwen (2020), among others. These prominent figures have paved the way for scholars worldwide towards fruitful and enlightening research on the roles of multimodality in education, including language teaching and learning, particularly in Indonesia.

The studies of multimodality in educational practices around the globe spread across various topics. Several authors focused on the perceived beliefs of language teachers towards multimodality in their teaching (Ajayi, 2010; Almusharraf & Engemann, 2020; Choi & Yi, 2016; Sakulprasantiri, 2020). Other scholars (Lim et al., 2021; Tan & Matsuda, 2020; Yi, 2014; Yi & Angay-Crowder, 2016; Yunus et al., 2022) provided more holistic scientific findings by delving into teachers’ beliefs and practices in integrating a multimodal approach to their teaching practices. Meanwhile, Pham and Li (2022) reported the perspectives of EFL Students in Vietnam towards Digital Multimodal Composing.

In the Indonesian context, investigations on the multimodal field in EFL context focused on EFL teacher’s perception of multimodality literacy (Trisanti et al., 2022), EFL students’ perceptions of multimodal integration (Djamurdjuri et al., 2021; Ilmi & Dewi, 2022), and the multimodal integration in EFL textbooks (Fitriana & Wirza, 2021; Jauhara et al., 2021). Other scholars explored the impact of multimodal-based learning on students’ literacy skills (Purba et al., 2023), and on their classroom involvement, social awareness, and literacy in using technology (Wulan et al., 2022). In relation to the previous studies, the current research aims to enrich empirical findings of multimodality in Indonesia in
particular, with a focus on what semiotic resources are deployed and how they serve to help teachers conduct more efficient and successful teachings.

**Analyzing semiotic resources using multimodal frameworks**

Since analyzing multimodal interaction means broadening the scope beyond writing and speech (Jewitt, 2009), a comprehensive framework offering researchers a tool to probe into a vast array of meaning-making resources is needed. Regarding this, the framework of multimodal interaction analysis proposed by Norris (2004, 2020) is applicable in many educational research contexts. Norris (2004) explained that among the communicative modes observable through multimodal interaction analysis are “proxemics, posture, head movement, gesture, gaze, spoken language, layout, print, (and) music - which are essentially systems of representation.” (p. 11). This framework was adopted by Apriani et al. (2021), Pramono (2019), and Qin and Wang (2021) in the offline EFL teaching context. In an online language teaching environment, Wigham and Satar (2021) applied this framework to explore experienced online teachers’ practices in videoconferencing. The framework is also applicable in science (Wilmes & Siry, 2021) and higher education (Bernad-Mechó, 2021). These studies are evidence that the framework established by Norris (2004, 2020) is relevant and applicable in research across disciplines, classroom settings, and educational levels.

Some scholars, however, adopted different frameworks in investigating semiotic resource orchestration in language teaching. For instance, Sukyadi et al. (2016) applied a multimodal framework by Bezemer and Kress (2008). Moreover, Ho and Feng (2022) developed a framework for integrating multimodality and translanguaging for analyzing meaning-making in recorded online English teaching. Finally, Sakulprasertsri (2020) designed an observation checklist, interview guideline, and questionnaire drawn on multimodal theories by the leading scholars (Jewitt & Kress, 2003; Kress, 2010), among others.

Of the reported studies on semiotic orchestration discussed above, only three of them were conducted in Indonesia (Apriani et al., 2021; Pramono, 2019; Sukyadi et al., 2016). Therefore, the current research, adopting Norris’ (2004) framework, is fundamental to provide enrichment to scientific evidence in the Indonesian context to inform stakeholders in education regarding the critical roles of multimodality in teaching and learning.
Method

Design

This study adopted a qualitative case study design, characterized by its nature of limiting the object/case of study, with only two teachers participating as the research subject (Merriam & Merriam, 2009). This case study, following Yin (2014), aims at probing into a real-life phenomenon (the use of semiotic resources) through multiple data collection instruments (interviews and documents). Moreover, this case study is an explanatory form of inquiry (Mills & Birks, 2014), providing an in-depth picture or description of the semiotic resources and the way they were orchestrated within classrooms. However, it is noteworthy that one of the shortcomings of a qualitative research design is biases or “subjectivities” (Merriam & Merriam, 2009, p. 15). Therefore, the drawback was anticipated by involving three researchers working collaboratively for more reliable research findings.

Context and participants

The participants in this study were two novice English teachers teaching in different institutions. Participant A was an English teacher in an Islamic senior high school in Bandung, while Participant B was an English teacher in an Islamic junior high school in Medan. Through purposive sampling (Merriam & Merriam, 2009), they were intentionally selected based on their ability to elucidate a specific theme, concept, or phenomenon and their knowledge of, and/or experience with, the focus of empirical inquiry (Robinson, 2014). Therefore, participant recruitment was grounded on two main criteria. First, both teachers had more than three years of teaching experience using multimodal supporting tools (iPad, website, digital applications, and projector). Secondly, they were considered familiar with the concept of multimodality.

In terms of an ethical issue, the participants’ privacy in this study is guaranteed. Consequently, no identifying information about the individuals was revealed in written or other communication (Hennink et al., 2019). The two participants were addressed as Teachers A and B. The demographic information of the participants is displayed in Table 1.

As displayed in Table 1, Teachers A and B have been teaching English for 5 and 4 years, respectively. Therefore, they were considered novice teachers when participating in this study. Both participants started their teaching upon receiving their Bachelor’s degree. Teacher A holds a B2 CEFR level of English, as evidenced by her score (PTESOL 560), while Teacher B has a B1 CEFR level of
English, as supported by her score of TOEFL ITP (517). This means that both participants have considerably good proficiency levels in English.

**Table 1**
The information of the participants

<table>
<thead>
<tr>
<th>Participants</th>
<th>Gender / age</th>
<th>Teaching experience</th>
<th>English level</th>
<th>Teacher category</th>
<th>Teaching site</th>
<th>School accreditation</th>
<th>Level of education</th>
</tr>
</thead>
<tbody>
<tr>
<td>Teacher A</td>
<td>Female / 27 years</td>
<td>5 years</td>
<td>PTESOL: 560</td>
<td>Novice</td>
<td>MA (Islamic senior high school)</td>
<td>A (excellent/high standard)</td>
<td>Bachelor’s degree in English education</td>
</tr>
<tr>
<td>Teacher B</td>
<td>Female / 26 years</td>
<td>4 years</td>
<td>TOEFL ITP: 517</td>
<td>Novice</td>
<td>MTs (Islamic junior high school)</td>
<td>A (excellent/high standard)</td>
<td>Bachelor’s degree in English education</td>
</tr>
</tbody>
</table>

Operating under the Ministry of Religious Affairs of Indonesia, the institutions where Teachers A and B are teaching both have “A” accreditation, which is assigned to schools achieving the highest standard of criteria by Badan Akreditasi Nasional Sekolah/Madrasah (National Accreditation Agency for Schools/Madrasahs) of Indonesia. It is further evidenced by the availability of learning-supporting media in both schools, such as projectors, computers, and internet connections, that are helpful for students and teachers to conduct teaching and learning activities.

**Data collection**

To answer the research questions, the qualitative data were obtained through interviews and document analysis. The use of multiple instruments, such as interviews and documents, was known as source triangulation to generate data rigorously and transparently (Lincoln et al., 1985). The following are the steps of data collection through structured interviews and documents.

**Semi-structured interview**

A semi-structured interview was chosen as it allows us to add or omit any aspect of the pre-planned questions. Moreover, the semi-structured interview consists of several key questions that help to define the research areas being explored (Alamri, 2019).
The interview data were collected through the following steps. First, after obtaining the schools' permission letters and participants' consent letters, we invited the participants to a Zoom meeting to discuss the venue/mode and time of the interview sessions and the language (Indonesian or English) used during the interviews. Second, we recorded telephone interviews with consent from the teachers. Drawing on the theoretical framework of multimodal interaction analysis (Norris, 2004), eight questions were developed into semi-structured interviews (see Appendix). The interviews with Participants A and B were held on the 5th of June, 2023, in separate sessions, each of which lasted for around thirty minutes. Immediately after the interview session completion, we contacted the participants through WhatsApp for clarification of their particular answers.

**Documentation**

The document is the umbrella term referring to a wide range of written, visual, digital, and physical material relevant to the study at hand (Merriam & Merriam, 2009). Moreover, Bowen (2009) stated that documents provided supplementary research data that serve as additional knowledge bases. Therefore, the documents related to classroom teaching, such as lesson plans, pictures, and videos, were collected and analyzed to provide more holistic answers to the research questions.

The steps of collecting data from the documents were as follows. First, we asked the teacher participants about the lesson plans, media, and any teaching resources utilized in their teaching practices. The documents collected as additional information on the data were videos, audio, and images serving as the semiotic resources used in their teaching activities. Finally, with their consent, these documents were used to help us answer research questions 1 and 2.

**Data analysis**

The qualitative data collected through interviews and documentation were analyzed using several steps. The interview responses were thematically analyzed, while the documents were through skimming, reading, and interpreting. The stages of interview thematic analysis are described in Table 2.

As shown in Table 2, the transcribed interviews were analyzed using six steps of thematic analysis (Braun & Clarke, 2006, 2012). First, after conducting the interview and returning the transcripts to the participants for accuracy and correctness, we started to read the transcripts repeatedly to familiarize ourselves with the data. In stage 2, we highlighted the important phrases using the Text Highlight Color feature to generate initial codes. In the third phase, we began to generate themes from the highlighted codes. The themes generated from the data
were deductive (for research question 1) and inductive (for research question 2). In phase 4, we reviewed, evaluated, and modified themes as needed. In the fifth stage, we refined the themes through a group discussion whenever necessary. Finally, in phase 6, we presented the final theme for the research report. First, the deductive themes for the first research questions were spoken language, pictures, video, proxemics, gestures, head movement, gaze, and music. Second, the inductive themes for the second research question were about the functions served by semiotic resources within classrooms, such as opening, delivering, and closing the class, explaining a learning content, performing interactions with students, checking the students' learning progress, managing classroom order, showing appreciation, and finally, conducting learning evaluation.

Table 2

<table>
<thead>
<tr>
<th>No.</th>
<th>Phase</th>
<th>Description of the process</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>Familiarizing ourselves with the data</td>
<td>Transcribing our data, reading and re-reading the transcribed interview answers</td>
</tr>
<tr>
<td>2.</td>
<td>Generating initial codes</td>
<td>Highlighting the participants' answers relevant to research goals</td>
</tr>
<tr>
<td>3.</td>
<td>Searching for themes</td>
<td>Grouping the highlighted answers into several head themes</td>
</tr>
<tr>
<td>4.</td>
<td>Reviewing themes</td>
<td>Working collaboratively to evaluate and modify themes as needed</td>
</tr>
<tr>
<td>5.</td>
<td>Defining and naming themes</td>
<td>Conducting a group discussion to finalize the themes</td>
</tr>
<tr>
<td>6.</td>
<td>Producing the report</td>
<td>Writing up the final themes in the finding section</td>
</tr>
</tbody>
</table>

The documents were analyzed through the steps proposed by Bowen (2009), involving skimming, reading, and interpreting. The practical steps of document analysis in this research context are as follows: First, the documents (lesson plans and other documents obtained from the participants) were classified into different semiotic resources (images, videos, texts, or audio). This phase was called skimming or superficial examination. Second, each document was thoroughly examined to investigate how the teachers used them during teaching. In this phase, we interviewed the participants and made some notes on the functions of the documents in teaching activities. Third, the analysis results were interpreted using Norris's theories of semiotic modes and multimodal interaction analysis (2004, 2020).
Trustworthiness

For the research rigor and transparency, the four criteria of qualitative research trustworthiness, encompassing credibility, transferability, dependability, and confirmability (Lincoln et al., 1985) were applied through the following steps.

First, to ensure research credibility, the transcribed interview data were checked through member-checking (Creswell & Creswell, 2018) for clarification and correction of the interview responses. First, during the interview sessions, both participants were asked direct follow-up questions where further explanation, confirmation, and clarification of their answers were needed. During the interview sessions, we highlighted some transcribed responses and contacted both interviewees to ensure their true intentions supported our interpretation.

Moreover, the results of interview data analysis were checked through researcher triangulation. First, we generated initial codes and put them into potential themes. Then, each of us evaluated the themes. Finally, we rewrote and refined the themes based on the evaluation. In this phase, we have achieved mutual agreement on the generated themes.

Then, the transferability of this study was achieved by recruiting the participants through purposive selection (Merriam & Merriam, 2009). First, we conducted preliminary interviews with four EFL teachers teaching in different institutions to investigate the extent to which they were familiar with multimodality. Second, we evaluated their responses and applied them to the references of participant selection based on our research nature. Finally, we selected two participants based on their familiarity with multimodality and their experience of using multimodal supporting tools. Moreover, teacher participants were selected since they had more than three years of teaching experience. The purposive selection we employed helps prospective researchers replicate the study by following a similar process of participant recruitment.

Third, we used peer debriefing in data analysis to assure confirmability and dependability. First, we generated codes on the interview transcripts and documents. Second, we provided feedback and input to the initial codes. Third, we conducted a Zoom meeting to discuss the analysis results and produced the final themes. The process was iterative until we achieved mutual agreement.

Findings

The data generated from the interview and document analysis show that two participants use multiple semiotic resources in their teaching practices.
Moreover, it was also revealed that those semiotic resources were orchestrated to help the participants organize the English lessons they taught in class. The findings are presented as follows, each answering research questions 1 and 2, respectively.

**The types of semiotic resources utilized in classroom teaching**

The first research question aims to reveal the semiotic modes utilized by two EFL teachers in their teaching practices. Findings demonstrate that both participants utilized spoken (verbal) language, pictures, video, proxemics, gestures, head movement, gaze, and music, as presented in the following sections.

**Spoken language**

As the most essential semiotic resource, verbal or spoken language is integral to the participants’ teaching activities. It is reflected in their explanation that verbal language is used throughout the phases of teaching, as shown below.

> I use spoken language as it is essential during the opening, teaching process, and closing. (Interview, Teacher A)

The data above shows how Participant A uses verbal language to perform various teaching activities, such as starting the class, delivering or explaining the lessons, and ending the class sessions. To sum up, spoken language is the most essential semiotic resource for successful teaching activities.

**Music and picture**

Music and pictures are the semiotic resources the participants use in delivering lessons. In this context, music and pictures are orchestrated to teach a genre-based text called recount text, as demonstrated below.

> Music and picture, or the combination of music, picture, and moving texts, are used in teaching recount text. (Interview, Teacher A)

As shown in the excerpt above, the teacher orchestrates music and pictures to teach a recount text, which is part of a genre-based approach. It shows that other than verbal or written language, music and pictures may be applied to explain the concept of genre-based texts. The interview response above is supported by the documents shown in Figure 1.

Figure 1 provides additional visual information to the historical recount text about the historical events of the Battle of Surabaya. Shown in the first picture is the photo of Bung Tomo, a national hero of Indonesia well-known for his role as a military leader during the National Revolution against the colonial forces in...
November 1945. Moreover, the other illustrative images display the heroes, Indonesian flags, and the weapons used in the battle.

**Figure 1**
*The pictures used in teaching historical recount text*

Video

Video is one of the semiotic resources employed by the participants to provide a multisensory learning experience for students through audio-visual media. One of the participants used the video to explain a historical recount text, as evidenced by the extract below.

In one session, I provided information about the recount text by playing a video [about recount text] retrieved from YouTube. (Interview, Teacher A)

The teacher’s interview response, as shown above, is further supported by a lesson plan designed to teach a historical recount text, as shown in Figure 2.
The interview excerpt and the lesson plan displayed in Figure 2 show that the teacher employs a video to deliver a lesson about a historical recount text, demonstrating that teaching genre texts is viable through various semiotic
resources. Additionally, Figure 3 shows the video employed by Participant B to teach a grammar unit.

**Figure 3**
A video used in teaching grammar “used to”

Figure 3 is an instance of a video used in teaching grammar unit ‘used to.’ As Figure 3 displays, the visual illustration provides information about the persons, objects, and animals involved in the discussion. The audio is accompanied by the transcript displayed in the video (I used to have a dog and a cat). Through the video, students receive the explanation through multisensory receptors, including visual and auditory.

**Proxemics**

Proxemics in this context refers to how the teacher uses the classroom’s physical space to interact with students or deliver the lessons. As the following excerpt shows, the teacher intentionally moves around the class to ensure her voice is audible to all students.

Sometimes, I walk around the class while explaining [the lessons]. That way, my voice is audible. So, I am not only in front of the class but also walking to the back, right, and left [side of the classroom] during teaching. (Interview, Teacher B)

The data above indicates that proxemics is one of the semiotic resources orchestrated by the participant to reinforce her verbal use when explaining the lesson.
Gestures

Gestures, a body movement, is used together with verbal language by the teacher. The use of gestures is aimed to amplify the messages delivered through verbal language, as shown in the interview excerpt below.

When speaking, we have to use gestures, especially when talking in English. A gesture is essential to help students understand. (Interview, Teacher B)

The excerpt above shows that Participant B orchestrates the use of a gesture in combination with spoken language. This interplay is to amplify the explanation to help students understand the lessons better. This practice implies the teacher’s awareness of the role of a gesture in delivering a lesson.

Head movement

Even though its density is not as high as other semiotic resources, the teacher participating in this study admits that at least two expressions may be expressed through head movement. Those expressions are agreement and disagreement, as shown below.

I nod my head when confirming or agreeing on something. Likewise, when showing disagreement, I shake my head to give emphasis [of disagreement]. (Interview, Teacher B)

The data above demonstrates that head movement is used by Participant B to show confirmation and express agreement and disagreement when interacting with students. Nodding the head is to show confirmation or agreement, while shaking the head is disagreement.

Gaze

One of the teachers acknowledges that gaze is intentionally used during teaching. The teacher is aware of the gaze’s significant role in keeping the class’s order. In this way, everyone in the classroom knows the teacher’s presence.

Of course, I am looking around the class, especially when the class is not conducive. Looking around [the class] is to keep the students focused. (Interview, Teacher A)

As shown in the excerpt above, participant A is aware of the essential role of a gaze to help students focus. This practice is fundamental to help students to be more attentive and cooperative during class.
The roles of the semiotic resources in EFL classroom teaching

The second research question deals with these semiotic resources’ functions in EFL teaching. The results demonstrate that either utilized in isolation or combination, these modes serve various functions, such as (1) opening, delivering, and closing the class, (2) explaining a learning content, (3) performing interactions with students, (4) checking the students’ learning progress, (5) managing classroom order, (6) showing appreciation, and finally, (7) conducting learning evaluation.

Opening, delivering, and closing the class

While the lesson outline is mostly structured by spoken language, other semiotic resources, such as music videos, are also applicable for structuring the class, as shown in the excerpt below.

Spoken language during lesson introduction ensures everyone is ready to follow the class. Spoken language is also used to review and connect the topic in the previous meeting with the current one. In the core phase, spoken language is used to explain the theory. In closing, spoken language is used to conclude what has been taught during the meeting. (Interview, Teacher A)

At the beginning of my teaching, I played a music video clip entitled ‘We Do Not Talk Anymore’… After that, I started explaining the topic of the lesson. (Interview, Teacher B)

The two excerpts above provide information on the way teachers use semiotic resources. Participant A confirms that speech is used throughout classroom teaching in the opening, core activities, and closing. Meanwhile, Participant B informs that music video is also useful to begin classroom teaching.

Explaining a learning content

One teacher described how a picture is orchestrated to help students comprehend the lesson better through multiple semiotic resources. In this context, the semiotic resources used together to create interplay are text and picture.

For example, I use a picture of kids eating chocolate to explain the sentence, ‘I used to eat a lot of chocolate.’ In this way, they will understand that the picture is to provide additional information to the text. (Interview, Teacher B)

The interview part above demonstrates how the teacher uses a picture as additional information to the written text about a particular topic, indicating the teacher’s orchestration of multiple semiotic resources during the main teaching
phase. The text and pictures create a semiotic interplay that provides students with a multisensory learning experience.

*Performing interactions with students*

Semiotic resources are not only applicable to knowledge transfer. They may serve as modes of interaction between teachers and students or among students. Regarding this, Teacher B described how she uses head movement to interact with her students, as shown below.

> When I want to confirm or agree on something, I shake my head to emphasize my confirmation and agreement. (Interview, Teacher B)

The excerpt above shows that head movement is another mode of how teacher-student interaction is carried out. It also implies the teacher’s awareness that communicating with individual students requires the interplay of semiotic resources, such as verbal and head movement.

*Checking students’ learning progress*

One of the teachers admitted that she explores the classroom to observe students’ learning progress. This activity helps the teacher facilitate learning equally for all students. The use of space to check students’ academic progress is shown below.

> Then, [I am] walking around the students one by one to check their progress. (Interview, Teacher A)

The excerpt above shows the teacher’s awareness of using space to see if students can appropriately follow the instructions. This activity is highly relevant when evaluating students’ understanding. By exploring the class, teachers can assist and facilitate students’ learning, especially those experiencing academic struggles.

*Managing the classroom order*

There are many ways of keeping the order of the class. In this context, the teacher utilizes gaze to maintain classroom order. The teacher’s gaze around the class raises students’ awareness to be quiet and attentive as their actions in the classroom are being observed.

> Of course, I am looking around the class, especially when the class is not conducive. Looking around [the class] is to keep the students focused. (Interview, Teacher A)
Displayed in the excerpt above is a reference to the teacher’s orchestration of a gaze to maintain classroom discipline. By observing the class through eye contact, the teacher sends a non-verbal message to all students to keep silent and pay attention to her. Doing this helps the teacher optimize the teaching and learning activities.

**Showing appreciation**

One of the teachers explained that students’ active participation in the classroom is recognized. The activities that demand students’ self-confidence and academic knowledge, such as performing in front of the class or answering questions, are appreciated by the teacher by giving applause, as evidenced by the interview response below.

> Clapping hands is to appreciate students who perform in front of the class or give answers to my questions. (Interview, Teacher A)

Shown in the excerpt above is the explanation of how the teacher praises students through gestures. It demonstrates that while praising, encouraging, and giving appreciation are typically done through verbal language, other semiotic resources, i.e., gestures, are also among the viable ways of appreciating students.

**Conducting learning evaluation**

Instead of using written or oral modes, one of the teachers instructed students to compose a video to evaluate their learning achievement. The videos created by the students are peer-assessed. During the process of video-making, the teacher allows students to use the available space within the school environment.

> I instructed my students to compose a conversation video and report it to their classmates. For their comfort, I allow them to do the activities outside the classroom. (Interview, Teacher B)

As shown in the excerpt above, participant B conducts the evaluation process by instructing students to create a multimodal text (video) about a particular topic taught in the session. Moreover, students are encouraged to do peer assessment by reporting each other work of video conversation composing.

**Discussion**

The findings of the first research question demonstrate that spoken language, pictures, video, proxemics, gestures, head movement, gaze, and music are
semiotic resources utilized by the participants in their teachings. It resonates with previous studies (Apriani et al., 2021; Pramono, 2019; Qin & Wang, 2021; Sukyadi et al., 2016), that reported the teachers' use of multiple semiotic resources in their English teaching activities. These studies, as well as the current one, align with Lim's (2021) notion that teachers interactively use multimodal resources to make meanings during classroom learning through language and other semiotic resources. However, in contrast to traditional classroom practices, the interactive use of semiotic resources in an online learning environment is subject to two main constraints: semiotic misalignment and semiotic lag (Wigham & Satar, 2021). Semiotic misalignment occurs due to “differences in the semiotic meaning-making resources available to the social actors involved in the interaction” (Wigham & Satar, 2021, p. 10) due to different specifications of electronic devices used by the teacher and students. Similarly, semiotic lag is caused by “delays in online transmission or technical issues (e.g., microphone not working)” (Wigham & Satar, 2021, p. 9).

Spoken language, as the findings show, occurs throughout the learning process, indicating the dominant use of verbal interaction during teaching. This is consistent with a study by Sukyadi et al. (2016), who found that the verbal mode to convey meaning is used by teachers more intensively compared to other modes. It is also supported by Norris (2004), who argued that “language seems to have the most informative content, which can easily be employed without a need for other channels.” (p. 1). Nonetheless, the verbal mode of communication delivered by the teachers is supported by other modes, such as gestures and head movement, creating a multimodal orchestration. According to Qin and Wang (2021), this communicative mode interplay promotes a sense of transition and adds cohesion to the representation of interactional meaning.

The findings of this study also show that both participants utilize pictures in combination with other semiotic modes, mainly texts. This practice, according to Moghtadi (2013), is useful as a visual response stimulus. Moreover, the use of images and texts creates a combination that works better compared to the single mode use (Gilakjani et al., 2011). It is also in line with Wardini et al. (2021), who found that language learners supported with picture books were more actively engaged and better comprehend the narrative text, which is in nature similar to a recount text. This genre-based text requires teachers to provide students with explicit teaching (Mustofa & Kurniawan, 2023). Finally, two other studies (Khoiriyah & Ilmi, 2023; Sakulprasertsri, 2020) demonstrated an increase in learner engagement in the lesson delivered using the combination of pictures and other media. Sakulprasertsri (2020) also reported that students could immediately apply the knowledge learned through various modes of semiotics.
in their real-life contexts. However, Guichon and McLornan (2008) suggested that visual information not directly linked to auditory information may distract learners’ attention and create a split-attention effect. Therefore, an interplay of communicative modes should be established to guide the students’ focus toward one topic only. It is also essential to optimally utilize available learning resources, such as coursebooks and printed learning materials, as they are generally more accessible than digital learning tools (Mustofa & Wirza, 2023).

The findings of the second research question demonstrate various roles of semiotic resources in EFL classroom teaching, such as opening, delivering, and closing the class, explaining learning content, performing interactions with students, checking the students’ progress, managing classroom order, showing appreciation, and conducting an evaluation. It confirms previous studies (Apriani et al., 2021; Pramono, 2019; Qin & Wang, 2021; Sukyadi et al., 2016). The study by Apriani et al. (2021) showed that EFL teachers utilized pictures or photographs as media to help explain a particular genre. Furthermore, Sukyadi et al. (2016) stated that the verbal mode, the gesture, and the action work in assemble to facilitate students’ understanding of the topic. Qin and Wang (2021) found that the teachers “resort to eye contact as one of the essential teaching aids to build social contact with students.” (p. 9). Finally, Pramono (2019) revealed that teachers orchestrated semiotic resources to create lessons with distinctive structures. This research finding and the previous studies demonstrate that the teaching process requires teachers’ strategies of using various semiotic resources beyond verbal language.

The previous studies and current research findings imply that teachers’ orchestration of semiotic resources by teachers is distinctive and unique, depending on their situational contexts. For instance, one teacher uses gaze to keep the students focused while the other applies it to build interaction with them. Nevertheless, Shanahan and Flury-Kashmanian (2014) found that despite the teachers’ different patterns of semiotic orchestration, their classroom instructions always come with more than just verbal explanations. However, the participants’ semiotic resource orchestration in this study does not generally represent EFL teachers in Indonesia due to their varied knowledge of multimodality and the resources supporting multimodal language teaching. Those teaching in rural areas may not receive equal benefits as the teachers working in town and city in terms of professional development programs on multimodal areas and teaching resources.

The different patterns of semiotic orchestration shown in this study are subject to multiple factors, including teachers’ personalities and pedagogical knowledge, learning resources available, classroom settings, and student
characteristics. On this account, teachers should be critically aware of how different semiotic resources are going to be orchestrated during the teaching. In other words, teachers should carefully prepare how multimodalities are employed to support learning (Mildenhall & Sherriff, 2018) while taking account of their situational contexts. It is important since nonverbal communicative modes, such as gesture and gaze, among others, contribute to the process of meaning-making (Qin & Wang, 2021).

The findings of this study imply that teachers generally use semiotic resources beyond spoken mode and tend to create semiotic interplay in distinctive and contextual ways. According to Sukyadi et al. (2016), the interplay of semiotic resources helps achieve learning objectives and create a more comprehensive and meaningful education for students. Similarly, Lim (2019) argued “that teachers’ orchestration of multimodal resources encourages a “more congruent and effective” learning experience for students” (p. 26) while creating a fertile context for meaning-making (Pantidos, 2017). Therefore, the high number of semiotic resources orchestrated in lesson delivery positively contributes to the quality of teaching as they provide students with multiple sensory learning.

This study suggests that strategies used in orchestrating semiotic resources contribute to more impactful teaching practices. In other words, multimodal competence helps teachers choose and assemble communicative modes to realize the functions of a classroom, such as gaining attention, stimulating motivation, setting up teaching objectives, and establishing communicative links (Qin & Wang, 2021). Similarly, Lim (2011) found that well-established semiotic resource orchestration helps teachers achieve lesson objectives, encouraging student participation and creating an engaging lesson. It means that the outcomes of classroom lesson delivery can be upgraded through enhanced teachers’ pedagogy and practices of multimodality in EFL teaching and learning. Therefore, EFL teachers must comprehensively grasp their multimodal pedagogical knowledge and practices. As a follow-up, they should improve their professional development by, among other things, joining workshops and conferences and exploring the studies of multimodality widely and openly available on journal websites.

The multiple uses of semiotic resources are also relevant to the currently in-use curriculum in Indonesia, a nation with a very long history of curriculum reforms (Mustofa & Martina, 2019). In Kurikulum Merdeka (Independent Curriculum), teaching English across education levels is focused on empowering the skills of using English through six language proficiencies: listening, speaking, reading, viewing, writing, and presenting different types of texts in an integrated
way. Taught through a genre-based approach, the texts may come in various forms, including spoken, written, visual, audio, and multimodal (Ministry of Education and Culture of the Republic of Indonesia, 2022). The policy confirms Lim’s (2021) argument that “the ‘multimodal turn’ has led many education systems worldwide to incorporate aspects of multimodality into their language curriculum” (p. 1). Therefore, we recommend that the future curriculum designed for EFL learners in Indonesia emphasize more the areas of teachers’ multimodal pedagogy and students’ understanding and ability in multimodal text compositions, in addition to genre-based texts.

To conclude, this study has revealed that language teaching and learning involve the use of various modes and semiotic resources. It is also evident that teachers create an interplay of semiotic resources to perform different types of tasks and activities within the classroom. However, as a result of internal and external factors, each teacher has distinctive strategies for employing semiotic resources, regardless of how the multiple uses of semiotic resources have greater positive impacts on learning outcomes than one single teaching mode. Finally, the significant roles of semiotic resources in language teaching and learning are also relevant to the currently in-use curriculum, Kurikulum Merdeka (Independent Curriculum), which aims to equip students with six linguistic skills: listening, speaking, reading, viewing, writing, and presenting different types of multimodal texts.

Conclusion

The current study sought to investigate semiotic resources selected and utilized by EFL teachers and the roles of those semiotic resources in EFL classroom teaching. We found that spoken language, pictures, videos, proxemics, gestures, head movements, gaze, and music were the semiotic resources used by both participants in their teaching. We also found that these semiotic resources were used in the opening, delivering, and closing of the class, explaining content, performing interactions with students, checking the students’ progress, managing classroom order, showing appreciation, and conducting evaluations.

The results imply that classroom teaching is administered through the use of multiple semiotic resources to perform various functions and tasks in the three domains of learning: cognitive, affective, and psychomotor. Therefore, the findings suggest the importance of teachers’ multimodal pedagogical competence in creating impactful classroom teaching and learning. This study comes with several limitations. First, methodologically, the instruments
employed were interviews and documentation. By employing observation, the dataset would have been denser and more accurate. Moreover, the findings are not statistically representative due to the absence of a quantitative research design and the number of participants recruited. So, we propose future researchers employ a mixed-method design and recruit more participants for better research findings. Second, the current research primarily focused on the teachers, therefore overlooking the aspects related to the students. So, we suggest prospective scholars conduct research involving wider parties in education. We also encourage future researchers to investigate the effects of teachers' pedagogical knowledge and practice of utilizing semiotic resources on students' cognitive, affective, and psychomotor development. Finally, policymakers in curriculum development for EFL learners in Indonesia should facilitate professional development in EFL teachers' multimodal pedagogy and students' knowledge and practices in multimodal learning.

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References


Appendix. Interview guidelines

1. Are you familiar with multimodality?
2. Do you know semiotic resources, including spoken language, proxemics, gesture, gaze, music, print, and layout?
3. Which semiotic resources (spoken language, proxemics, gesture, gaze, music, print, and layout) do you use in your teaching?
4. What are the functions of spoken language in your teaching?
5. What are the functions of proxemics or classroom space in your teaching?
6. What are the functions of gesture in your teaching?
7. What are the functions of gaze in your teaching?
8. What are the functions of music, print, and layout in your teaching?