

Teachers' Hand Gestures as Visual Cues in the English Teaching and Learning Process

Ajeng Anggraeni^{1*}, Basikin²
Yogyakarta State University

Corresponding Author: Ajeng Aggeraeni
ajenganggraeni.2022@student.uny.ac.id

ARTICLE INFO

Keywords: Teachers' Hand Gestures, Frequency, Teaching and Learning Process

Received : 3 October

Revised : 4 November

Accepted: 19 December

©2024 Anggraeni, Basikin: This is an open-access article distributed under the terms of the [Creative Commons Attribution 4.0 International](https://creativecommons.org/licenses/by/4.0/).



ABSTRACT

This study examines the hand gestures of English teachers during lessons in two junior high schools in Tasikmalaya, concentrating on their varieties, frequency, and their impact on student learning. We collected data through teacher interviews, classroom observations, and qualitative content analysis of gestures. The research utilized Systemic Functional Multimodal Analysis, appraisal theory, and a gesture framework for data analysis. Findings reveal that teachers utilized representational, metaphorical, deictic, and evaluative gestures, adapting their use to students' proficiency levels, with beginners receiving more gestures. These intentional hand gestures helped understanding, accommodated diverse learning styles, and increased student engagement, highlighting gestures' vital role in effective teaching and learning

INTRODUCTION

The effectiveness of teaching goes beyond intellectual capacity; it heavily relies on a teacher's ability to foster communicative competence with students. This is especially crucial when introducing new concepts, as students across all ages may face difficulties in understanding the material (Valenzeno et al., 2003). Gesture, as a powerful nonverbal communication tool, plays a significant role in classroom interaction, serving as a bridge between educators and learners. Liu et al. (2020) underscore the importance of gestures in English teaching, highlighting their role in cultivating positive relationships, maintaining discipline, and enhancing instructional efficiency. Elements such as eye contact, hand movements, spatial distance, and facial expressions contribute to the clarification of information and support student comprehension.

Nonverbal cues, particularly hand gestures, have been shown to be crucial in second language acquisition. Wang and Loewen (2016) emphasize that both the quantity and quality of teachers' hand gestures significantly impact students' motivation and ability to learn. Sato (2020) confirms that the use of hand gestures by English as a Foreign Language (EFL) teachers in Japan enhances the organization of lessons and the quality of input provided to students. Liu et al. (2020) further elaborate on how hand gestures contribute to classroom communication by developing an analytical framework that aids both teaching and student comprehension.

Despite the abundance of research on nonverbal communication in education, a significant gap remains regarding the types of teachers' hand gestures that specifically aid student understanding in EFL contexts, particularly in Indonesia. This gap is important because, when teaching a foreign language, gestures can be instrumental in enhancing comprehension. This study, therefore, aims to explore a largely overlooked area: the specific types of hand gestures used by teachers, their frequency, and the reasons for their use in Indonesian EFL classrooms. By addressing this gap, the research offers fresh insights into the role of hand gestures in EFL education, shedding light on how nonverbal communication can aid students' understanding.

Given the increasing demand for improved EFL education in Indonesia, where students often struggle with English proficiency, the relevance of this study becomes even more pressing. In a globalized world where English competence is critical, understanding the impact of teachers' hand gestures could lead to more effective teaching practices and better educational outcomes.

This study aims to achieve three primary objectives: (1) to define and categorize the types of hand gestures used during the teaching and learning process, (2) to quantify the frequency of these gestures, and (3) to explore the contribution of hand gestures to students' comprehension. By doing so, the study seeks to provide valuable insights into how the strategic use of gestures can enhance educational practices and support students' learning experiences.

LITERATURE REVIEW

Gestures are fundamental to nonverbal communication and significantly influence education, especially in the context of foreign language acquisition. They not only attract attention but also enhance student enthusiasm and engagement. Hişmanoğlu and Hişmanoğlu (2008) assert that gestures communicate knowledge and emotions, enhancing the dynamism and engagement of lessons. Studies conducted by Harris (2003), Hudson (2011), and Smotrova (2017) demonstrate that gestures enhance cognitive functions, including memory and attention, hence promoting language skill development. Peltier and Macedonia (2014) also discovered that gestures offer visual feedback in foreign language classrooms, affirming students' utterances and fostering enhanced interaction. When paired with affirmative nonverbal signals, such as facial expressions, gestures establish a friendly and trustworthy atmosphere that improves both teacher-student relationships and overall educational results.

In addition to facilitating communication, gestures profoundly impact cognitive and language functions. Rahmat (2015) characterizes them as instruments that enhance verbal communication, allowing educators to articulate intricate concepts with increased precision. Liu et al. (2020) categorize gestures into functional and random forms, where functional gestures facilitate communication and comprehension, whereas random gestures are not directly pertinent to the instructional material. Martinec (2004) categorizes gestures into presenting, representing, and indexical types, each fulfilling distinct functions, ranging from practical demonstrations to symbolic interpretations. This comprehensive knowledge highlights the significance of gestures in enhancing classroom interactions, accommodating various circumstances, and intensifying student involvement through a cohesive approach to language and movement.

Teachers' hand gestures are essential for elucidating intricate concepts and sustaining student attention. McNeill (2019) emphasizes the inherent connection between gestures and speech, indicating that visual signals can elucidate spoken directives, particularly in difficult or cacophonous settings. Alibali and Nathan (2014) observe that educators often employ gestures, including pointing, waving, and raising hands, to elucidate complex content and address student inquiries. These actions not only improve understanding but also foster a more participatory and engaging teaching environment. According to Martin and White (2005), educators can cultivate inclusive and dynamic learning environments by intentionally integrating natural and intentional gestures into their teaching, hence promoting deeper comprehension and active engagement.

METHODOLOGY

This study used qualitative content analysis to investigate the data. This method assists researchers in reaching solid findings by recognizing and evaluating specific occurrences in spoken, visual, or written data (Downe-Wamboldt, 1992). It is appropriate for research that requires evaluating the meaning of content in its context (Williamson et al., 2018).

The study took place in May 2024 at two junior high schools in Tasikmalaya, Indonesia, and focused on 7th-grade English classes. The study aims to investigate the types, frequency, and impact of teachers' hand gestures

during the learning process. The group consisted of two teachers and 34 students. The teachers, referred to as "Teacher A" and "Teacher B" for anonymity purposes, were chosen based on their availability and willingness to participate (Hamied, 2017; Cresswell, 2015). Both teachers had three years of experience and were well-known for their unique teaching approaches. Teacher A taught 28 students, while Teacher B taught only 6. At the conclusion of the study, students expressed their opinions on the professors' hand gestures during English classes.

Classroom observations, video recordings, interviews, and student questionnaires all contributed to data collection. Observations and recordings were made throughout two lessons with each teacher, using a checklist based on Basikin (2008) and Liu et al. (2020) to track gesture types and frequencies. Interviews with instructors were done to learn about their use of gestures in the classroom, following Basikin et al.'s (2024) standards. Students filled out questionnaires to give feedback on how the gestures helped them understand the lessons.

The study analyzed gestures using Liu et al.'s (2020) framework, which divides them into functional and random categories. Martin and White (2005) used their appraisal approach to examine how gestures express attitudes and emphasis, providing a comprehensive picture of how gestures enhance learning in the classroom.

RESEARCH RESULT

Teachers Using Various Types of Hand Gestures

Teachers Using Representational Hand Gestures

Teacher hand gestures are more than just exuberant flourishes – cognitive science research has proved them to improve learning. Representations, such as drawing a circle to illustrate cycles or copying waves to explain electricity, help children understand abstract concepts. When these motions simplify complex concepts, students learn and remember more (Alibali et al., 2009).

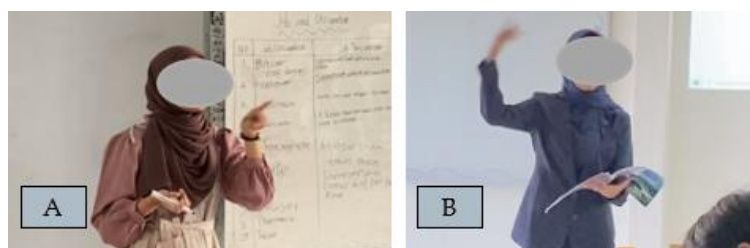
Teachers A and B demonstrate their nonverbal communication skills with a variety of representational hand gestures. These motions go beyond pointing. Examples include waving, raising fingers, copying objects, rising hands, and clenching fists. Each motion enhances learning clarity and effect in a unique way. Gestures improve comprehension and student involvement, according to Yeo et al. (2017).



Pictures 1. Raising Fingers as Teachers Representational Hand Gestures

In this photo, teacher A may point to generations, members, or offspring when explaining a family tree. Alibali (2009) found that gestures ground abstract concepts in somatic experience. The teacher simultaneously said, "One girl and one boy."

Teacher B described the game's verb usage without speaking. She indicated the verb number or form with a finger (two for past tense). According to Bergman and Macedonia (2014), iconic gestures help learners learn words through visual representations.



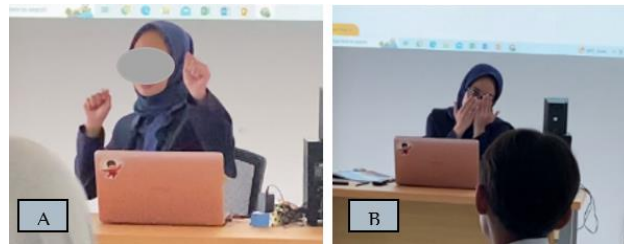
Picture 2. Motion of Something abstract as Teachers' Representational Hand Gestures

This shows a figurative hand gesture. In the photo, teacher A was asking students to estimate which jobs fit the board descriptions. She illustrated a fire with her fingers as she explained, "Who puts out a fire?" McNeil (2000) emphasizes gestures in speech comprehension, especially for complex concepts. The firing hand motion emphasizes and clarifies the job description.

Teacher A's question, "[A person who puts out a fire is?], promotes teacher-student interaction in heteroglossia." While teaching, the teacher uses a fire-like hand motion to increase engagement. This shows that gestures can be more effective than words (Nathan et al., 2019). A visual indication, such as a fire gesture, can aid children in understanding. This strategy promotes heteroglossia – the dynamic and interactive use of language (Bakhtin, 2010) – by actively engaging students in learning.

The next picture shows Teacher B asking, "What was the last movie you saw yesterday?" The teachers waved their hands to denote [yesterday], resulting in heteroglossic engagement. According to Tellier et al. (2021), multimodal communication enhances understanding using pictures and words. The gesture allows students to relate to "yesterday."

By waving her hands for yesterday, Teacher B helps her children grasp time. This unique strategy makes learning fun and encourages student interaction with open-ended questions (Overoye & Wilson, 2020). While gestures vary by culture, Teacher B waving her hands shows that a simple movement may motivate students and make the classroom more active.



Picture 3. Clenching Hands and Hands Over the Face as Teachers' Representational Hand Gestures

Teacher A asks students, "What did the folks in the pictures do?" Dancing and clenching hands depict people dancing. The utterance and clinched hand gesture demonstrate heteroglossic involvement. Teacher A includes student voices, viewpoints, and cultural references. This multidimensional approach creates an interesting, multi-perspective atmosphere that increases student participation and comprehension. 2005 (Martin and White).

Picture 3 depicts Teacher A asking, "Wanna wash your face a bit?" while simultaneously suggesting a wash. This heteroglossic engagement uses spoken words and gestures. The teacher's comments offer a remedy and consider the students' sleepiness. Kress (2011) emphasises how words, pictures, and gestures enhance meaning in classrooms. Shapiro (2018) said gestures like this can improve understanding. Recognizing student needs and promoting involvement through a variety of communication modalities creates a more engaging and inclusive learning environment.

Heteroglossic's potency is demonstrated by the teacher's questions and hand motions. The dynamic and interactive learning environment engages students. Teachers A and B use verbal and nonverbal communication to suit diverse students' needs and improve comprehension. This method shows how blending voice and hand gestures can greatly improve language learning.

Teachers Using Metaphorical Hand Gestures.

Our hand movements go beyond imitation. It connects concrete and intangible notions. Metaphorical gestures use manual task experiences to explain abstract subjects. McNeill (2000) claims that these movements are a basic manner of conceiving abstract ideas, not only visual representations of speech. Larsson and Stolpe (2023) demonstrate how these gestures connect intellectual notions to daily bodily motions.

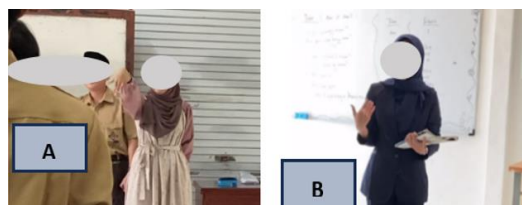
Metaphorical hand gestures can enhance the classroom experience beyond idea clarification. Research shows they are highly effective at comprehension and engagement (McNeill, 2019). These movements draw students in, making lectures participatory. Embodied learning, according to Bozkurt et al. (2016), solidifies cognitive processes through bodily acts. These gestures transcend linguistic barriers and are more than just ornaments. They make abstract concepts visible, improving communication, student engagement, and comprehension.



Picture 4. Index Finger on Lips as Teachers' Metaphorical Hand Gestures

Metaphoric hand motions help lecturers visualise abstract subjects. An example is Teacher A's "shushing" move during brainstorming. The vocalisation "shhh" is aural, but touching the lips adds symbolism. It does not exclude sound, but it emphasizes the need for stillness in order to think clearly. Teachers' "shushing" gestures vary by context. Teacher A can utilise this global signal to quiet the class and encourage collaborative or independent work. Teacher B may stare silently at a student or group. In this case, the gesture targets disruptive activity. It conveys calmness without disrupting class.

Metaphoric hand gestures are effective classroom tools for controlling and instructing students. These nonverbal cues help students stay on track without disturbing class (Liu et al., 2020). Teachers A and B showed how these gestures can make their classes more engaging. According to Lim (2019), metaphorical gestures enhance verbal explanations and explain important subjects during teaching. This example illustrates how context matters when employing nonverbal messages in teaching. The execution of a gesture affects its impact. A teacher's "shushing" can convey different meanings depending on the context. Because gesture execution influences impact.



Picture 5. Waving Hands as Teachers Metaphoris Hand Gestures

In the following image, Teacher A and Teacher B guided and motivated their students in a game using spoken and non-spoken communication. The lecturers waved their hands while saying "Come here" or "Come, come." These metaphors graphically reinforce spoken directions, emphasising their clarity. The Judgement in Attitude paradigm by Martin and White (2005) shows how the teacher's actions and words judge student engagement. The order "Come here" requires students to perform a game action. The lecturers waved their hands to emphasise their vocal appeals for participation. Gordon et al. (2021) says this technique is about setting a strong tone and getting students involved in the game's rules and goals. This method reveals how spoken words and gestures guide student behaviour and class engagement. Teachers can engage and inspire students by employing these communication methods.



Picture 6. Raising Hand as Teachers Metaphoric Hand Gestures

The metaphorical hand gestures continue as they raise their hands. Both teachers raised their hands for different reasons. Teacher A invited her students to respond to her stated inquiry. Who can respond? Teaching B raised her hand and stated [hold wait] to stop her students from being too excited to answer the content inquiry. Teachers might promote student engagement by raising their hands and asking, "Who can answer this?" Martin & White (2015) are heteroglossic. This strategy encourages a diverse range of student perspectives, producing a more inclusive conversation. Students feel free to participate in this cooperative learning environment. Therefore, successful education values the promotion of inclusive communication and critical thinking.

The raised hand and vocal cue convey a willingness to hear student criticism, highlighting the significance of student engagement in classroom discussions. Student engagement increased considerably when teachers utilized open-ended prompts and gestures like raised hands, according to Erianti et al. (2018). Heteroglossia in the classroom promotes critical thinking, collaboration, and diverse perspectives, according to Waring (2021). By encouraging kids to speak up, this participatory approach fosters a welcoming environment and works alongside outstanding teachers to provide a diverse and inclusive education.

Teacher B's hand-raising and "Wait, wait" can be analysed using Martin and White's (2015) Judgement in Attitude framework. This paradigm involves judging behaviour according to societal norms. Teacher B raises her hand and says "wait, wait," expressing her perspective on the students' excessive enthusiasm and the need to restore order and justice. This gesture and spoken instruction encourage students to wait and take turns, promoting respect and consideration. Raised hands and vocal gestures emphasize authority and disciplined participation, as well as managing classroom dynamics. MacDonnell et al. (2021) emphasise student learning objectives, and Teacher B's methods promote equal involvement. This creates an impartial and friendly environment for a successful education



Picture 7. Lifting Hands as Teacher Metaphorical Hand Gestures

Lifting hands is the most abstract hand motion that Teachers A and B do. Both teachers raised their hands in distinct contexts, as shown in the photos. While conversing and reviewing her students' work, Teacher A raised her hand and exclaimed, "Yuk everyone!" to prompt her students to repeat the pronunciation of the word. According to Martin and White (2005), Teacher A's use of graduation in Forse is purposeful.

Teacher Lifting her hand while checking students' work and having them repeat after her emphasizes involvement and perfect pronunciation. Classroom gestures clarify and reinforce vocal instructions, according to Liu et al. (2020). Lim (2019) says gestures improve comprehension and engagement. Teacher A engages students by raising her hand to visibly emphasize her lesson. This gesture encourages students to answer jointly and emphasizes correct pronunciation. This gesture keeps students focused and reinforces her lecture with visual and audible features.

Teacher B's response to a student's movie-related question with a raised hand and "Oh, like magic?" is not spontaneous. This action works to foster positive behavior. Martin and White (2005) call this "appreciation" in their attitude framework. Gesturing promotes student comprehension and engagement, according to Liu et al. (2020). Teacher B's hand raise acknowledges students' perspectives and creates a supportive environment that honors their ideas (Lim, 2017). This technique encourages participation, a healthy classroom environment, cooperative learning, and meaningful interactions.

Teachers Using Evaluative Hand Gestures

Teachers use hand gestures to give feedback, praise, disapproval, and encouragement during lessons. These gestures affect student engagement, motivation, and comprehension in the classroom. Clapping hands celebrates successes, encourages positive behavior, and shows approval. Thumbs up or down express approval or disapproval.

By promoting correct answers and good behavior, positive gestures such as thumbs up or nodding boost student confidence and drive. Instant nonverbal feedback helps students understand their performance without disrupting the lecture, while dynamic gestures engage students and make sessions more participatory. According to Liu et al. (2020), these nonverbal cues can help students understand and remember information, making learning more effective. Lim (2019) highlights the value of evaluative hand gestures in delivering rapid, unambiguous feedback to maintain student engagement and motivation.



Picture 8. Thumbs Up as Teachers Evaluative Hand Gestures

As the kids answered the question, the teachers gave them a thumbs-up and said [good] and [good job]. According to Martin and White (2005), this behaviour falls within the attitude framework's judgement category. Evaluation gestures speed up visual assessment, whereas vocal acknowledgement conveys support. These gestures and verbal praise help teachers reinforce desired activities and learning outcomes through different modalities.

Understanding students' learning processes requires assessing their ability to react to questions and effort. Perseverance is the ability to persist, whereas comprehension is the ability to understand. Teachers can praise these traits with thumbs-up motions. This technique recognizes students' strengths and hard work, according to Liang and Lim (2021), and creates a good and stimulating classroom environment. These hand gestures can boost student motivation and engagement.



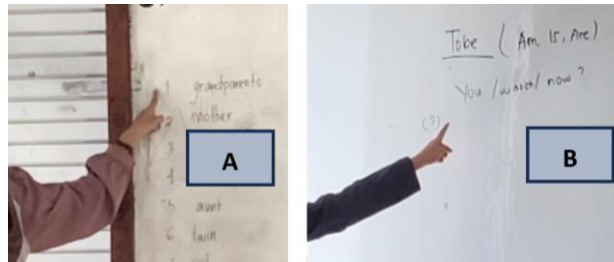
Picture 9. Clapping Hands as Teachers Evaluative Hand Gestures

In the first image, the teacher claps, and shouts "waaaaw, good work," showing positive emotion and delight at a student's success. According to Martin and White's appraisal theory (2005), this reflects affect, a part of emotional expressiveness. In the second image, the teacher claps and says, "Oh, really? Congratulations, Yay!" blending affect and judgment. This praise boosts students' confidence and acknowledges their achievements. Verbal and nonverbal cues, like applause and enthusiastic comments, create a supportive environment that enhances student engagement and comprehension (Pangaribuan et al., 2022).

Teachers Using Deictic Hand Gestures

Teachers employ deictic hand gestures to draw students' attention to specific aspects of a situation. Directing students' attention to objects, pictures, or text sections requires nonverbal skills like pointing, gesturing, or showing. This visual communication strategy improves knowledge and retention, especially in complicated subjects, and bridges communication gaps in classes where verbal communication is insufficient. Deictic gestures can improve student learning and engagement.

Deictic gestures also encourage active learning. Teachers' gestures during explanations can make lessons more participatory and dynamic. Teachers encourage student engagement by following gestures and linking them to spoken explanations. This interactive technique improves learning and keeps students engaged (Beege et al., 2020).



Picture 10. Pointing to the Board as Teachers' Deictic Hand Gestures

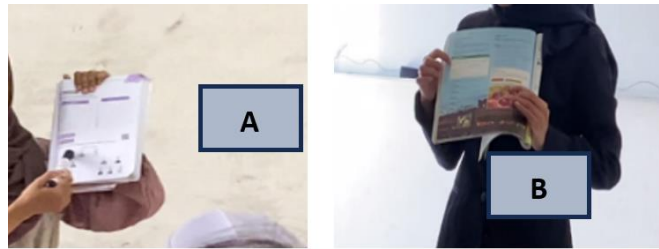
Teachers A and B use deictic gestures, like pointing to the board, to direct students' attention to key topics, making learning more engaging. Bentley et al. (2023) found that combining gestures with explanations improves student retention and understanding. For instance, Teacher A uses a heteroglossic gesture (Martin & White, 2005) to point to the board while asking, "Grandparent is?" This gesture invites multiple perspectives and encourages interaction. Teacher B's gestures while saying, "Let's make a question from you" also fit the heteroglossic framework, promoting new ideas and active participation. These gestures foster a collaborative learning environment and enhance student engagement and comprehension.



Picture 11. Pointing to the Students as Teachers Deictic Hand Gestures

Teacher A points to a student and says, "What is the policeman's job?" This question and gesture aim to elicit a cognitive response according to the student's comprehension of police officer work functions. Teacher A targets a question at a student to set a clear expectation for their response and actively engage them in learning. This is dialogical interaction. In this monoglossic method, the teacher expects a specific response to the employment posting under discussion. By focusing their cognitive resources, the pointing motion engages students and emphasizes the question.

Alternatively, Teacher B asks a student, "What activities do you have planned for the next weekend?" This inquiry is social rather than intellectual, suggesting an interest in the student's personal life and hobbies. Like Teacher A, Teacher B points to a student. This inquiry is dialogic and open-ended, allowing for more responses. It encourages students to share their experiences, expanding conversation and engagement options. Pointing also personalizes the experience, making the student feel valued. Showing students the value of their personal experiences in class can boost engagement.



Picture 12. Pointing to the Book as Teachers' Deictic Hand Gestures

Teacher A describes it as, "Look at this family tree!" This imperative form conveys the teacher's enthusiasm and urgency, alerting students to the instructional tool. The short, authoritative phrase emphasizes the family tree's value with force and minimal emphasis, leaving little room for interpretation. The urgent mood emphasizes the necessity to focus on the visual aid, amplifying the directive; "this family tree" narrows students' attention, defining the instructional aim and direct action. This explicit language and gesture show the teacher's intent to actively engage students and direct their topic knowledge.

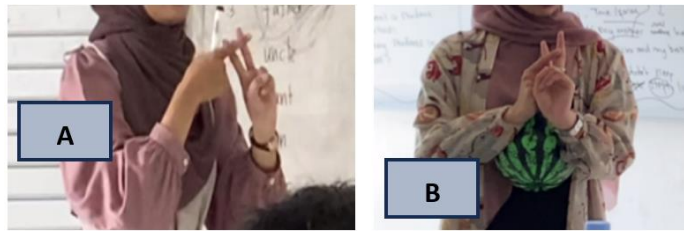
Teacher B, discussing grammar structure, points to the book and says, [Now, practice!" Find the tense's name. This directive uses imperatives, indicating proactiveness and task desire. The monoglossic remark gets a quick response by adding "now" to show urgency. The focus is on a specific activity, which highlights what students should look for and strengthens direction.

Teachers used deictic hand gestures to convey instructions and emphasize visual aids. Verbal and nonverbal communication creates a pleasant emotional atmosphere that encourages students to participate in the teacher's enthusiasm and pay attention. Liu (2020) says this improves student attention and understanding. Teachers' gestures and words engaged and focused students on relevant activities, improving educational engagement and effectiveness. This interaction can also improve learning by making students feel comfortable and engaged, according to Liu (2020).

Teachers Using Beating Hand Gestures

Teaching with beating hand motions promotes communication, student involvement, and recall (Liu, 2020). When used with spoken words, these rhythmic gestures make learning more participatory. These movements are visual clues that help children remember, according to Liang and Lim (2021). Striking hand motions teach key concepts through repetition.

Teachers can teach difficult subjects by visually segmenting and syncing hand gestures with spoken words to emphasize key topics (Liang & Lim, 2021). Strategically using thumping hand motions can boost student comprehension, engagement, and communication (Liu, 2020). Understanding the cultural context could clarify these gestures and unique teaching approaches. Generally, pounding hand motions assist lecturers to emphasize points, adjust speed, and discreetly engage students (Kendon, 2004).



Picture 13. Listing Using Fingers as Teachers' Beating Hand Gestures

Teacher A's question, "Who are they?" goes beyond information. The strategic tool aligns with Martin and White's appraisal theory (2005) in Attitude. Teacher A stimulates student participation and curiosity by posing this question. The finger-listing gesture supports this, visibly organizing and emphasizing crucial points. This aids children in understanding by establishing a clear sequence. Teacher A creates a friendly environment where students can contribute and demonstrate their learning. It encourages active learning and stronger family engagement.

Teacher B's listed gestures assist students in understanding past tense forms by organizing information. According to Martin and White's Appraisal Theory (2005), this is "graduation," when the teacher uses gestures to increase subject complexity. This strategy helps students organize their thoughts and emphasizes classification in grammatical understanding. It encourages students to cognitively categories and communicate their ideas, improving classroom learning and conceptual clarity.



Picture 14. Clap Hand as Teachers' Beating Hand Gestures

In the classroom, teachers often use clapping to get students' attention. Both teachers successfully employed clapping and verbal cues like "alright" and "ok so" to refocus students. These verbal and nonverbal cues quickly restore classroom control, ensuring students are engaged and ready for the lecture.

Clapping and saying "alright" or "ok so" may engage students, but overuse may lessen their effectiveness. The goal is to integrate them organically into the course so that students can transfer without disruption. Li et al.'s (2021) foreign language acquisition study emphasises explicit instructions and smooth transitions to engage students. This supports the assumption that clapping and cue words prepare children for incoming information. Applauding and gestures can also boost communication and engagement, according to Barry et al. (2011).

Teacher Using Emotional Hand Gestures

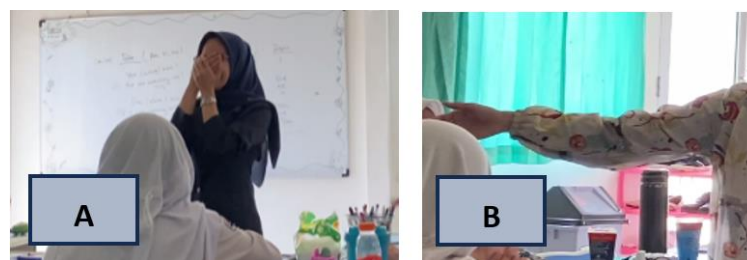


Picture 15. Clenching and Separated Hands as Teachers Emotional Hand Gestures

Martin and White's (2005) appraisal framework show that the teacher's "I'm good, I'm outstanding" statement positively affects attitude. This phrase effectively conveys enthusiasm and confidence, which are essential for a captivating and appealing teaching environment. By showing positive emotions, the teacher encourages students to pursue the subject with enthusiasm. Student participation, morale, and involvement can improve with emotional contagion, creating a more dynamic and supportive learning environment.

Teacher A employs distinctive hand gestures to gauge and convey the emotions of her students. To make learning more engaging, she transcends words with "wonderful" half-round hand movements. Bozkurt et al. (2016) found that hand gestures help people understand emotions. Students who struggle with expressing their emotions could potentially benefit from this approach.

Combining vocal affirmations with non-verbal signs in the classroom encourages multiple communication styles and improves learning. Teacher A uses positive words and expressive gestures to accommodate varied learning styles, making instructional information more accessible and engaging. Goldin-Meadow (2014) emphasises that gestures enhance verbal learning. Students remember better when provided with information verbally and visually



Picture 16. Hand Over Face as Teachers' Emotional Hand Gestures

Martin and White's (2005) appraisal technique can help us comprehend Teacher B's emotional and evaluative activities. In response to her students' powdered faces, Teacher B laughed and covered her face, demonstrating "pleasure" in the affect subsystem. Her laughter and eager engagement suggest that she is enjoying herself, demonstrating her ability to create engaging instructional activities. This behaviour also fosters normalcy and respect for the game's outcome, making the classroom pleasant.

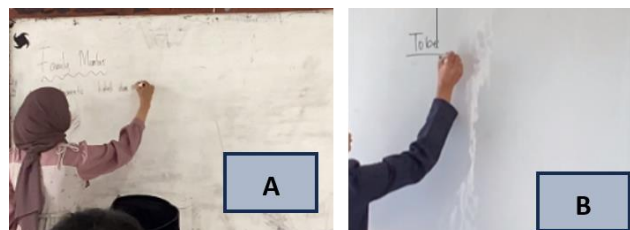
When Teacher B checks a student's temperature and says, "Oh, your temperature is quite high," she shows concern for the student's health. This topic falls under the category of affect, specifically concern and care. The teacher's diligence demonstrates her ability to monitor and manage students' health needs, as well as her tenacity and accountability. Teacher B cares about students' health and maintains a safe and healthy classroom. All these examples show Teacher B's balanced classroom management, which creates a caring learning environment.

Teachers B's classroom management emphasizes providing a positive and engaging learning environment and ensuring student well-being. This encourages student interaction and deepens the teacher-student relationship, creating a more open and pleasant classroom. Her concern for students' health demonstrates her commitment to their well-being, which is critical for a healthy learning environment. Engaging activities that encourage student participation and enjoyment are crucial to a positive classroom atmosphere, according to Liang and Lim (2021). They believe comedy and interactive components in the classroom increase student participation and academic success.

g. Teachers Using Operational Hand Gestures

Teachers use operational hand gestures to demonstrate their use of instructional technology. These motions include pointing, gesturing, and showing students how to use resources like the whiteboard or textbooks with descriptive movements. Teachers can also use regulatory gestures to manage tool usage, such as indicating calculator times or switching learning aids. Graphically highlighting the session's tools helps to simplify lectures and encourage student participation.

Operational hand gestures allow teachers to communicate, explain lessons, and get students involved with a variety of classroom technologies. Visual instructions with hand gestures improve comprehension and engagement, making learning more dynamic and participatory (Lim, 2017). Teachers can make learning more engaging and clearer by mixing practical tasks with educational approaches. This method promotes communication clarity and instructional efficacy, encouraging student participation and excitement (Liu et al., 2020).

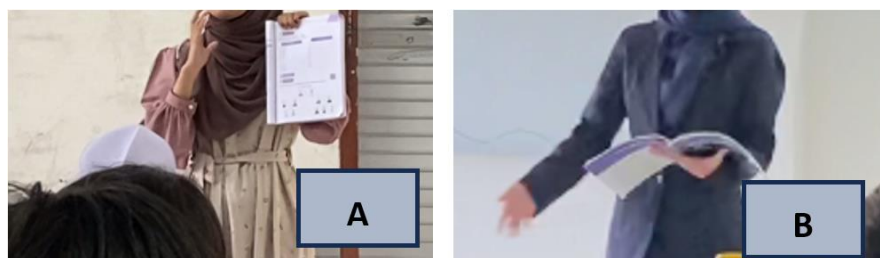


Picture 17. Writing on the Board as Teachers Operational Hand Gestures

In these photos, the teachers wrote on the board with markers and made operating hand gestures. The positive attitude toward helping children understand demonstrates energy and passion. Teaching this practice improves comprehension and retention. The teacher's board notes actively engage students in learning, fostering conversation and deeper involvement.

Well-organised notes help students identify and focus on key learning areas. Well-structured notes let students focus on learning rather than arranging material (Chew & Cerbin, 2021). Well-organised notes help students understand and apply the teacher's comments to the text. This clarity promotes metacognitive awareness, allowing students to understand what they understand and what lacks clarity.

Additionally, writing on the board facilitates dynamic teacher-student engagement. Real-time interaction enables quick answers and clarifications, creating an engaging learning environment. The teacher's organization and presentation can also help students learn note-taking and information management. The classroom becomes interactive and collaborative when writing on the board goes beyond information transmission, making the classroom interactive and collaborative.

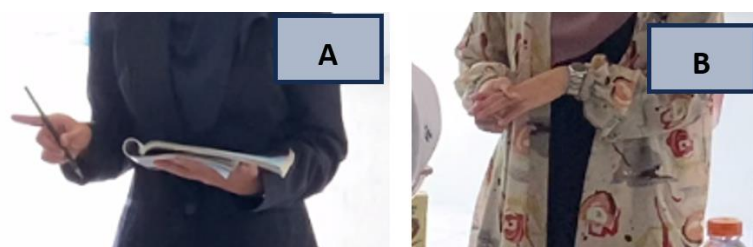


Picture 18. Using a Book as Teachers Operational Hand Gestures

Teacher A's statement, "You can see an example of the family tree here," is monoglossic because it confirms that the book has a family tree example. This strategy reduces ambiguity and improves comprehension by focusing students on the topic. This sentence objectively conveys facts while praising the content's importance and resource value. This methodical approach helps retain instructional authority and boost classroom involvement by focusing on learning objectives.

Teacher B employs heteroglossic engagement by asking, "So what is the exact answer for question number 2?" These gestures and questions encourage students to participate and respond accurately, emphasizing correctness and focusing their attention. This type of engagement encourages students to actively participate by asking for a specific response rather than assuming expertise. To improve comprehension and learning, Teacher B encourages critical thinking and information memory.

Teacher Using Negative Hand Gestures



Picture 19. Teachers Negative Hand Gestures

Teachers' actions like spinning pens and playing with rings show anxiousness or disengagement, which could have a negative effect. These behaviors may indicate that Teacher A feels uncomfortable or disengaged. The subtle transfer of emotions through nonverbal behavior is known as negative impact. Teachers may feel uneasy, preoccupied, or uncomfortable during their teaching sessions. These actions could be an automatic way of reducing stress. These acts may indicate a lack of confidence or doubt in the subject, affecting teachers' capacity to communicate and maintain authority.

These motions may distract kids. Students may notice a teacher's discomfort or distraction and struggle to focus during the presentation. Teacher fidgeting can distract students, making learning less effective. This is critical because teachers must convey material and model an appropriate attitude and involvement. According to Liu et al. (2020), classroom communication relies on nonverbal cues like body language and gestures, and unpleasant or erroneous gestures might hinder learning. Liu et al. (2020) found that a teacher's disengagement may make it harder for students to focus, reducing educational efficacy.

Teachers can reduce these impacts by making sure their hand gestures are effective and intentional. It is critical to identify lecture points where gestures can improve comprehension and plan accordingly. Students can correlate motions with meanings by making consistent gestures for common instructions or concepts (Lim 2019). To avoid misinterpretation, be mindful of cultural differences in gesture interpretation. Communicating nonverbally with coworkers or in a mirror ensures clarity and purpose.

The Intensity of Teacher Hand Gestures in English Teaching and Learning Process

Both Teacher A and Teacher B frequently use hand gestures during lessons to enhance student comprehension. These gestures help clarify abstract concepts and boost engagement. For example, representational gestures are used to visualize complex ideas, while deictic gestures direct attention to specific items. Beating gestures are used to emphasize key points, making them more memorable. This frequent use of gestures is consistent with the interview responses from the teachers, who highlighted their role in supporting students, especially those who are beginners or slow learners. Teacher A and B adapt their gestures based on students' needs, especially when introducing new vocabulary or explaining complex topics. Their gestures create a more engaging and interactive environment, making it easier for students to visualize and understand the material.

Research supports these observations, showing that gestures improve communication and learning effectiveness. Studies by Kelly et al. (2010) and Peng et al. (2022) highlight that gestures capture attention, reinforce learning, and enhance memory retention. Gestures can be tailored to diverse learners, making them a valuable teaching tool, particularly in language learning contexts.

The Contribution of the Use of Teachers Hand Gestures

Hand gestures play a crucial role in effective teaching by enhancing students' understanding and engagement (Sato, 2022). Teachers A and B use various gestures, such as representational, evaluative, and deictic gestures, to make their lessons clearer. Representational gestures help explain abstract concepts, while deictic gestures guide students' focus to important points. This combination of visual cues with speech improves communication and understanding (Novack & Meadow, 2015; Peng et al., 2022).

Questionnaire results showed that 75% to 90% of students felt their teachers' gestures helped them understand English lessons better. Gestures like pointing or raising hands made instructions clearer, especially for difficult topics like grammar and vocabulary. Students also said gestures increased their confidence, kept them focused, and improved their overall performance in class.

These findings emphasize the importance of integrating hand gestures into teaching, especially for language learners. Gestures improve comprehension, focus, and confidence, making lessons more productive and engaging. Teachers who effectively use gestures can address language difficulties and make complex topics easier to understand, improving student learning outcomes.

Both Teacher A and Teacher B agree on the value of hand gestures in teaching. Teacher A sees gestures as helpful for simplifying explanations and helping students visualize content, especially in learning English. Teacher B believes gestures are essential for beginners, as they provide visual cues that support understanding and engagement. Functional gestures, such as representational, metaphorical, and deictic gestures, help clarify difficult topics and emphasize key points, creating a more inclusive and effective learning environment (Liu et al., 2020; Istiqamah et al., 2023).

CONCLUSIONS AND RECOMMENDATIONS

The study found that English teachers use representational, metaphorical, evaluative, dialectic, thumping, emotional, operational, habitual, and negative hand gestures as visual cues. The analysis and interview showed that teachers A and B use representational, metaphorical, and deictic hand gestures. They alter hand gesture frequency and type depending on the learner's ability. Teachers A and B use more hand gestures with beginner students, who benefit from visual context, to improve comprehension and learning. Teachers deliberately use hand gestures to explain complicated topics, regulate classroom behaviour, and create a supportive learning environment for varied learning styles and requirements.

This extensive analysis identifies teachers' hand gestures, their frequency, and their contribution. It also shows that intentional hand gestures improve student comprehension and accommodate varied learning styles. Teacher gestures help create a more engaging and successful learning environment. This study highlights the importance of using hand gestures in teaching to improve student learning.

This study can inform future research on teachers' hand gestures in areas other than English. Comparing gesture use throughout elementary, middle, and high school may reveal age-related differences in effectiveness. A cross-cultural study might show how cultural differences affect gesture use, while longitudinal studies could track gesture use over time in the same instructional situation. Using Observer XT software for comprehensive video analysis could help categorize and measure gestures, revealing their effects on classroom dynamics.

ADVANCED RESEARCH

This study emphasizes the potential for further research on the impact of teachers' hand gestures on learning in domains beyond English instruction. Analyzing gestures across elementary, middle, and high school levels may uncover age-related disparities, with younger pupils favoring simpler gestures and older students reacting to gestures that highlight intricate concepts.

Cross-cultural research may investigate how cultural norms influence the utilization and interpretation of gestures in pedagogy, facilitating the adaptation of approaches to various cultural contexts. Longitudinal research could monitor the evolution of gestures over time within the same classroom, revealing patterns of efficacy. Software such as Observer XT can facilitate the analysis and categorization of gestures, providing insights into their influence on classroom dynamics and student engagement.

ACKNOWLEDGMENT

The researchers express gratitude to her supervisor Prof. Basikin, S.Pd., M.Phil., M.Ed., Ph.D for supporting this research and all the participants for their permission to perform this research.

REFERENCES

- Alamillo, A. R., Colletta, J. M., & Guidetti, M. (2013). Gesture and language in narratives and explanations: The effects of age and communicative activity on late multimodal discourse development. *Journal of child language*, 40(3), 511-538.
- Alibali, M. W., & Nathan, M. J. (2014). Teachers' gestures as a means of scaffolding students' understanding: Evidence from an early algebra lesson. In *Video research in the learning sciences* (pp. 349-365). Routledge.
- Alibali, M. W., Evans, J. L., Hostetter, A. B., Ryan, K., & Mainela-Arnold, E. (2009). Gesture-speech integration in narrative: Are children less redundant than adults?. *Gesture*, 9(3), 290-311.
- Bakhtin, M. M. (2021). *The dialogic imagination: Four essays by M. M. Bakhtin* (C. Emerson & M. Holquist, Trans.). University of Texas Press.
- Barry, B. E., Bodenhamer, J., & O'Brien Jr, J. J. (2011). Student nonverbal communication in the classroom. In *American Society for Engineering Education* (pp. 1-14). American Society for Engineering Education.
- Beege, M., Ninaus, M., Schneider, S., Nebel, S., Schlemmel, J., Weidenmüller, J., ... & Rey, G. D. (2020). Investigating the effects of beat and deictic gestures of a lecturer in educational videos. *Computers & Education*, 156, 103955.

- Bentley, B., Walters, K., & Yates, G. C. (2023). Using iconic hand gestures in teaching a year 8 science lesson. *Applied Cognitive Psychology*, 37(3), 496-506.
- Bozkurt, E., Yemez, Y., & Erzin, E. (2016). Multimodal analysis of speech and arm motion for prosody-driven synthesis of beat gestures. *Speech Communication*, 85, 29-42. <https://doi.org/10.1016/j.specom.2016.10.004>
- Chew, S. L., & Cerbin, W. J. (2021). The cognitive challenges of effective teaching. *The Journal of Economic Education*, 52(1), 17-40. <https://doi.org/10.1080/00220485.2020.1845266>
- Cochet, H., & Vauclair, J. (2014). Deictic gestures and symbolic gestures produced by adults in an experimental context: Hand shapes and hand preferences. *Laterality: Asymmetries of Body, Brain and Cognition*, 19(3), 278-301. <https://doi.org/10.1080/1357650X.2013.804079>
- Creswell, J. W. (2015). *Educational research: Planning, conducting, and evaluating quantitative and qualitative research*. pearson.
- Downe-Wamboldt, B. (1992). Content analysis: method, applications, and issues. *Health care for women international*, 13(3), 313-321. <https://doi.org/10.1080/07399339209516006>
- Erianti, A., Akib, E., & Baso, F. A. (2018). An analysis of teachers' questioning strategies in ELT (English Language Teaching) the classroom interaction at eleventh grade SMA Muhammadiyah 1 UNISMUH Makassar. *Exposure Journal*, 7(1), 58-70.
- Goldin-Meadow, S. (2014). Widening the lens: what the manual modality reveals about language, learning and cognition. *Philosophical Transactions of the Royal Society B: Biological Sciences*, 369(1651), 20130295.
- Gordon, R., Scalise, N. R., & Ramani, G. B. (2021). Give yourself a hand: The role of gesture and working memory in preschoolers' numerical knowledge. *Journal of Experimental Child Psychology*, 208, 105145 <https://doi.org/10.1016/j.jecp.2021.105145>
- Harris, T. (2003). Listening with your eyes: The importance of speech-related gestures in the language classroom. *Foreign Language Annals*, 36(2), 180-187. <https://doi.org/10.1111/j.1944-9720.2003.tb01468.x>
- Hişmanoğlu, M., & Hişmanoğlu, S. (2008). The use of body language in foreign language learning and teaching. *Selçuk Üniversitesi Edebiyat Fakültesi Dergisi*, (19), 165-178.
- Hood, S. (2011). Body language in face-to-face teaching: A focus on textual and interpersonal meaning. *Semiotic margins: Meaning in multimodalities*, 31-52.
- Hudson, N. (2011). *Teacher gesture in a post-secondary English as a second language classroom: A sociocultural approach* (Doctoral dissertation, University of Nevada, Las Vegas). *Dissertations & Theses*
- Istiqamah, I., Baa, S., & Samtidar, S. (2023). TEACHERS'NON-VERBAL COMMUNICATION INFLUENCING STUDENTS'MOTIVATION IN LEARNING ENGLISH FOR THE YOUNG LEARNERS. *Klasikal: Journal of Education, Language Teaching and Science*, 5(1), 1-24. <https://doi.org/10.52208/klasikal.v5i1.611>

- Kelly, S. D., Özyürek, A., & Maris, E. (2010). Two sides of the same coin: Speech and gesture mutually interact to enhance comprehension. *Psychological science*, 21(2), 260-267.
- Kendon, A. (2004). *Gesture: visible action as utterance*. Cambridge: Cambridge University Press.
- Krause, C. M., & Farsani, D. (2022). More than words: An integrated framework for exploring gestures' role in bilinguals' use of two languages for making mathematical meaning. *Canadian Journal of Science, Mathematics and Technology Education*, 22(4), 773-795. <https://doi.org/10.1007/s42330-022-00253-y>
- Kress, G. (2011). *Multimodality: A social semiotic approach to contemporary communication*. routledge.
- Kusanagi, Y. (2015). *The roles and functions of teacher gesture in foreign language teaching*. Temple University.
- Larsson, A., & Stolpe, K. (2023). Hands on programming: Teachers' use of Metaphors in gesture and Speech make Abstract concepts tangible. *International Journal of Technology and Design Education*, 33(3), 901-919. <https://doi.org/10.1007/s10798-022-09755-0>
- Li, Y., Chen, K., Su, Y., & Yue, X. (2021). Do social regulation strategies predict learning engagement and learning outcomes? A study of English language learners in wiki-supported literature circles activities. *Educational Technology Research and Development*, 69, 917-943. <https://doi.org/10.1007/s11423-020-09934-7>
- Liang, W. J., & Lim, F. V. (2021). A pedagogical framework for digital multimodal composing in the English Language classroom. *Innovation in Language Learning and Teaching*, 15(4), 306-320. <https://doi.org/10.1007/s10798-022-09755-0>
- Liao, J., & Wang, H. C. (2019). Gestures as intrinsic creativity support: Understanding the usage and function of hand gestures in computer-mediated group brainstorming. *Proceedings of the ACM on Human-Computer Interaction*, 3(GROUP), 1-16. <https://doi.org/10.1007/s10798-022-09755-0>
- Lim, V. F. (2019). Analysing the teachers' use of gestures in the classroom: A systemic functional multimodal discourse analysis approach. *Social Semiotics*, 29(1), 83-111. <https://doi.org/10.1080/10350330.2017.1412168>
- Lincoln, Y. S., & Guba, E. G. (1988). *Criteria for Assessing Naturalistic Inquiries as Reports*
- Lisnawati, N., Hidayati, A. N., Silvani, D., Abdullah, F., & Andriani, A. (2021). Delivering English Language Teaching Materials Through Hand Gestures: A View From Multimodal Perspective. *Ilkogretim Online*, 20(6), 1803-1819. DOI: 10.17051/ilkonline.2021.06.174
- Littlejohn, S. W., & Foss, K. A. (2010). *Theories of human communication*. Waveland press.

- MacDonnell, M., McClain, K., Ganguli, A., & Elias, M. J. (2021). It's not all or nothing: Exploring the impact of a social-emotional and character development intervention in the middle grades. *RMLE Online*, 44(2), 1-15. <https://doi.org/10.1080/19404476.2020.1868226>
- Macedonia, M. (2014). Bringing back the body into the mind: gestures enhance word learning in foreign language. *Frontiers in psychology*, 5, 1467. <https://doi.org/10.3389/fpsyg.2014.01467>
- Martin, J. R., & Rose, D. (2003). *Working with discourse: Meaning beyond the clause*. Bloomsbury Publishing.
- Martin, J. R., & White, P. R. R. (2005). Attitude: ways of feeling. In *The Language of Evaluation* (pp. 42-91). Palgrave Macmillan, London. 10 (3): 313-329. <https://doi.org/10.1080/10350330050136370>
- Martinec, R. (2004). Gestures that co-occur with speech as a systematic resource: the realization of experiential meanings in indexes. *Social semiotics*, 14(2), 193-213.
- McNeill, D. (2019). *Gesture and thought*. University of Chicago press. <https://doi.org/10.7208/9780226514642>
- McNeill, D. (Ed.). (2000). *Language and gesture* (Vol. 2). Cambridge University Press.
- Mularsih, P. S., & Satyarini, E. (2022). Using mother tongue in EFL classrooms: Pros and cons. *Aplinesia (Journal of Applied Linguistics Indonesia)*, 6(1), 26-32. <https://dx.doi.org/10.30595/aplinesia.v6i1.13693>
- Nathan, M. J., Yeo, A., Boncoddo, R., Hostetter, A. B., & Alibali, M. W. (2019). Teachers' attitudes about gesture for learning and instruction. *Gesture*, 18(1), 31-56. <https://doi.org/10.1075/gest.00032.nat>
- Novack, M. A., Goldin-Meadow, S., & Woodward, A. L. (2015). Learning from gesture: How early does it happen?. *Cognition*, 142, 138-147.
- O'Halloran, K. L. (2008). "Systemic Functional-Multimodal Discourse Analysis (SF-MDA): Constructing Ideational Meaning Using Language and Visual Imagery." *Visual Communication* 7 (4): 443-475. <https://doi.org/10.1177/1470357208096210>
- Overoye, A. L., & Wilson, M. (2020). Does gesture lighten the load? The case of verbal analogies. *Frontiers in psychology*, 11, 571109.
- Pangaribuan, D., Sinambela, E., & Huszka, B. (2022). Communication strategies used by a teacher in teaching English at SMP Swasta Katolik Assisi Medan. *Jurnal Scientia*, 11(01), 378-392.
- Peng, Z., Yang, Z., Xiahou, J., & Xie, T. (2022). Recognizing teachers' hand gestures for effective non-verbal interaction. *Applied Sciences*, 12(22), 11717. <https://doi.org/10.3390/app122211717>
- Polit, D. F., & Beck, C. T. (2013). Is there still gender bias in nursing research? An update. *Research in nursing & health*, 36(1), 75-83. <https://doi.org/10.1002/nur.21514>
- Qoriah, M. (2020). an Analysis of Visual Social Semiotics in English Textbook. *Edukasi: Jurnal Pendidikan Dan Pengajaran*, 7(1), 6-18. <https://doi.org/10.19109/ejpp.v6i2.5518>

- Rahmat, A. (2018). Teachers' gesture in teaching EFL classroom of Makassar state university. *International journal of science on research*, 6,81-90. <https://doi.org/10.21275/ART20172113>
- Sari, S. Y. (2018). *A Study on Lecturer's Gestures in the EFL Classroom Context* (Doctoral dissertation, Universitas Negeri Makassar).
- Sato, R. (2020). Gestures in EFL classroom: Their relations with complexity, accuracy, and fluency in EFL teachers' L2 utterances. *System*, 89, 102215. <https://doi.org/10.1016/j.system.2020.102215>
- Schreier, M. (2012). *Qualitative content analysis in practice*.
- Shah, S. K., & Corley, K. G. (2006). Building better theory by bridging the quantitative-qualitative divide. *Journal of management studies*, 43(8), 1821-1835. <https://doi.org/10.1111/j.1467-6486.2006.00662.x>
- Shapiro, L. (Ed.). (2018). *The Routledge Handbook of Embodied Cognition* (1st ed.). Routledge. <https://doi.org/10.4324/9781315775845>
- Smotrova, T. (2017). Making pronunciation visible: Gesture in teaching pronunciation. *Tesol Quarterly*, 51(1), 59-89. <https://doi.org/10.1002/tesq.276>
- Songbatumis, A. M. (2017). Challenges in teaching English faced by English teachers at MTsN Taliwang, Indonesia. *Journal of foreign language teaching and learning*, 2(2), 54-67. <https://doi.org/10.18196/ftl.2223>
- Tellier, M., Stam, G., & Ghio, A. (2021). Handling language: How future language teachers adapt their gestures to their interlocutor. *Gesture*, 20(1), 30-62. <https://doi.org/10.1075/gest.19031.tel>
- Unsworth, L. (2001). *Teaching multiliteracies across the curriculum: Changing contexts of text and image in classroom practice*. Buckingham: Open University Press.
- Valenzeno, L., Alibali, M. W., & Klatzky, R. (2003). Teachers' gestures facilitate students' learning: A lesson in symmetry. *Contemporary Educational Psychology*, 28(2), 187-204. [https://doi.org/10.1016/S0361-476X\(02\)00007-3](https://doi.org/10.1016/S0361-476X(02)00007-3)
- Van Leeuwen, T. (2005). *Introducing social semiotics*. London: Routledge
- Wang, W., & Loewen, S. (2016). Nonverbal behavior and corrective feedback in nine ESL university-level classrooms. *Language Teaching Research*, 20(4), 459-478. <https://doi.org/10.1177/1362168815577239>
- Waring, H. Z. (2021). Harnessing the power of heteroglossia: How to multi-task with teacher talk. *Classroom-based conversation analytic research: Theoretical and applied perspectives on pedagogy*, 281-301. https://doi.org/10.1007/978-3-030-52193-6_14
- White, M. D., Marsh, E. E., Marsh, E. E., & White, M. D. (2006). Content analysis: A flexible methodology. *Library trends*, 55(1), 22-45. <https://doi.org/10.1353/lib.2006.0053>
- Williamson, V., Stevelink, S. A., & Greenberg, N. (2018). Occupational moral injury and mental health: systematic review and meta-analysis. *The British Journal of Psychiatry*, 212(6), 339-346. <https://doi.org/10.1192/bjp.2018.55>

- Zahra, S. A. (2021). Learning through screens: How gestures, facial expressions, and motivational statements influence foreign language learning experience online (Master's thesis, University of Twente)
- Zubaydah, Soraya, I., & Safriyani, R. (2017, August). Conversational hand gestures of student teachers to give instruction in microteaching class of English teacher education department at Sunan Ampel State Islamic University Surabaya. In International Conference on English Language Teaching (ICONELT 2017) (pp. 279-285). Atlantis Press. <https://doi.org/10.2991/iconelt-17.2018.58>