

A Qualitative Inquiry into Gesture Functions among Iranian Novice and Expert Teachers

¹Sima Shamsaie

²Fazlollah Samimi*

³Shahram Afraz

Research Paper

IJEAP- 2305-1965

Received: 2023-03-01

Accepted: 2023-06-01

Published: 2023-06-30

Abstract. The present study focuses on gesture functions Iranian novice and expert teachers express and utilize in the classroom in order to develop qualitatively-oriented models of gesture functions. The participants were 15 novice and 14 expert teachers teaching English at language institutes. In order to collect the data, the researchers carried out a number of initial interviews, observations and post-observation interviews. In fact, 8 novice and 10 expert teachers were initially interviewed to brainstorm their ideas as to which gesture types they used and why. Afterwards, 15 classes of differing proficiency levels were observed through direct non-participant observation. Finally, 37 post-observation interviews were held to help clarify on confusing observations. Applying Corbin and Strauss (2008) systematic steps of open, axial and selection coding, novice teachers, on the one hand, employed gestures for didactic (practice & feedback) and disciplinary (management & punishment) purposes. Expert teachers, on the other, utilized gestures for didactic (practice, instruction & feedback), disciplinary (Management) and rapport (Confidence, encouragement & involvement) functions. Practically, the results of the current research have specific and practical suggestions for novice teachers in order to enable them in managing and teaching learners more efficiently. It can also be assumed that non-verbal communication, in general, and gesture, in particular, can facilitate learning, and this is the experience of expert teachers that make them flexible users of a combination of verbal and nonverbal strategies.

Keywords: Categories of gestures, novice teachers, expert teachers, teachers' gestures

Introduction

In the 17th and 18th centuries, gesture was considered a global language and a pioneer to verbal communication (Kendon, 2004). The interest in sign language remained until the 19th century, yet gesticulation studies were not taken much into consideration until Efron (1941) started to investigate gestures as an aspect of language and considered the relationship between these two constructs. Overall, "Gestures are not just movements and arms waving in the air, but symbols that exhibit meanings in their own right and different from spoken language" (McNeill, 1992; p. 105). In all settings, speakers use gesture when they talk. Even blind speakers move their hands while talking (Iverson & Goldin-Meadow, 1997, 1998, 2001) and these movements are associated with the meaning expressed in the speech.

According to Alibali et al., (2013) any gesture has a distinctive role in classroom teaching such as expressing the basics of perception, showing intellectual recreations of activity and recognition, and

¹ PhD Candidate, sh.selya@yahoo.com; Department of English Language Teaching, Qeshm Branch, Islamic Azad University, Qeshm, Iran.

² Assistant Professor of TEFL (Corresponding Author), Fazl.samimi67@gmail.com; Department of English Language Teaching, Bandar Abbas Branch, Islamic Azad University, Bandar Abbas, Iran.

³ Assistant Professor of TEFL, a.sh32@rocketmail.com; Department of English Language Teaching, Qeshm Branch, Islamic Azad University, Qeshm, Iran.

considering conceptual allegories based on the body; e.g. a teacher's utilization of indicating gestures demonstrate a better action for learning, more proficient visual examination, and more consideration to the learning substance that the teacher points to, irrespective of looking directly (Pi et al., 2019).

As gestural communication, many researchers have concentrated on the gestures teachers employ in the classroom (Kamiya 2016; Lim 2019; McNeil, Alibali, & Evans, 2000). For example, Liu et al., (2022) conducted a study in the same field focusing on the gesture categorization that teachers used in classroom from multiple representation viewpoint. The findings of their research demonstrated that this new approach can differentiate between various gesture features and different teachers regarding their teaching experience. Many other studies in the recent years have been conducted on gesture and its categorization (Brito et al., 2022; Bosmanus & Bejune, 2022; Dai, & Li, 2021; Gazzelo et al., 2019; Khatin-Zadeh et al., 2023).

They suggested that gesture is a highly effective means of exchanging information, acquiring knowledge and aiding in the process of reasoning. They also believed that gesturing in the classroom by teachers can facilitate learning, however, as far as the researchers are concerned, few studies appear to categorize gesture from the perspectives of novice and expert teachers and their practice about the communicative functions they carry in the classroom in terms of models for novice and expert teachers. Tsui (2003) differentiated novice and experienced teacher according to the following characteristics: Firstly, novice teachers were found to follow almost the expressed aims and activities within the prescribed syllabus guideline, however, experienced teachers showed more independence in their planning, and while using syllabus guides for building their lessons, they make changes based on the learners' needs and their objectives. Secondly, most expert teachers engage in longer-term planning but novice teachers engage in short-term planning. By contrast, expert teachers are more efficient in lesson planning, i.e. they have previous plans in their mind. Novices, on the contrary, have little or no previous experience and have to spend much time and energy to make plans for activities and to apply methods. Thirdly, expert teachers are more flexible in planning and much more ready to make modifications to the plans. For expert teachers, the context is an essential section of their teaching practice, whereas for novice teachers, the context is mostly disregarded. It is hoped that through this study, further evidence can be provided to fill the gap regarding gestures categorization and how Iranian EFL teachers use gestures in the classroom teaching. Therefore, this study aimed at answering the following questions?

Research Question One: What functions of gesture emerge as a result of conducting interviews, observations and post observation- interviews with Novice and Expert Teachers?

Research Question Two: What overall qualitative model of gesture functions develop for teachers?

Review of the Related Literature

Non-verbal Communication in Teaching

A great part of our face to face talks and discussions is non-verbal and sign language, and our sentiments and attitudes are expressed by gestures without uttering a word. In a study on the relationship between verbal and non-verbal communication Babelan (2012) found a significant relationship between the teacher's proper and timely-verbal and non-verbal behaviors and students' success and fine manners. One of the major barriers that the teachers and students face in establishing their communication is ambiguity in teacher's utterance. Proper communication proficiency in classroom is definitely one of the prominent features of competent teachers, and stress in classroom can lead to poor communication (Najafi & Rahmazadeh, 2013), because students subconsciously pick up non-verbal cues from the teacher and find out if the teacher is eager to teach.

When teachers are cognizant of nonverbal communication in the classroom they can improve their ability to (a) receive more accurate signals from students, (b) transmit harmonious and positive messages to signify prospect, carry attitudes, control interactions and strengthen learning, and (c) refrain

from inharmonious and negative signals that distract students and restrain them from learning (Miller, 1986).

Mortazavi (2013) argued that proper use of nonverbal communication with a simple greeting can be an excellent way to initiate the class. Teachers' nonverbal communication can have some positive effects on students. According to Zeki (2009) teacher's gesture in the classroom is very significant in that it helps students understand the material better and get motivated. Also, teacher's vivacious and delighted face during teaching can make students learn the materials with more enthusiasm. Yuanyuan (2014) declared that when a teacher enters the classroom with a warm smile, it makes students feel more comfortable. Another positive impact of teachers' nonverbal communication can be eye contact while students are speaking, because the teachers looks more interested and more spirited in teaching.

In addition, in a study on the role of gesture in learning and whether children use their hands to change their minds, Goldin-Meadow (2006) found that children given instruction that included an appropriate strategy for problem-solving in gesture were meaningfully more likely to generate the problem-solving strategy in their own gestures during the same training term compared to the children not exposed to the strategy using gesture. In fact, children can utilize their hands to alter their minds.

Gestures' Categorizations

Various scholars, (e.g., Ekman & Friesen, 1969; Kendon, 1988; McNeill, 1992; Rimé & Schiaratura, 1991; Wang, Bernas & Eberhard, 2004), have suggested different types of gestures. Among these, McNeill (1992) of *beats*, *deictic*, *iconic*, and *metaphoric* gestures have been commonly used in studies concerning instructional topics.

According to Freedman (1977), *beats* are a type of gesture that does not refer to anything specific and are characterized by rhythmic emphasis. They are non-verbal and do not convey any speech content, but instead, they complement the rhythm of speech and convey non-narrative content. These gestures take various forms, including hand movements. As McNeill (1992. P. 15) puts "of all gestures, beats are the most insignificant looking". He described beats as gestures in which "the hand appears to be beating time. As forms, beats are mere flicks of the hand(s) up and down and back and forth, zeroing in rhythmically on the prosodic peaks of speech" (McNeill, 2006; p.301).

Deictic gestures involve pointing in either a concrete or abstract manner. Concrete pointing is amongst the earliest gestures to develop, typically emerging at around ten to twelve months of age. This is when a child extends their index finger, or another body part, to indicate an object of interest. The gesture can be used to specify or indicate something in the immediate physical space of the speaker, such as saying ("this document shows ...") while pointing to the document (Bates, 1976). McNeill (1985) defines *iconic* gestures as hand movements that closely relate to the meaning of the words they accompany. These gestures resemble concrete objects or events and demonstrate the characteristics of the action or event being described, such as ("she climbed up the ladder ...").

Also, McNeill (1992) explains that *metaphoric* gestures have a similar physical form to iconic gestures, but they convey abstract concepts and are often culturally specific in meaning. These gestures are representational such as using a gesture to indicate that a meeting went on for a long time. *Co-speech* gestures are unplanned bodily movements that occur while speaking and they have significant ties to the speech's meaning, particularity and overall context (Kita, van Gijn & van der Hulst, 1998). They only take place with speech i.e. gesture and speech occur at the same time (McNeill, 1992). *Speech-linked gestures* are like co-speech gestures but with the difference that speech and gesture do not happen at the same time. In other words, Speech-linked gestures involve a delay between speaking and gesturing, with speech preceding the bodily movement. *Emblems* are a form of nonverbal communication that express meaning without the use of words and are not dependent on speech. Each culture has its own set of emblems, with each emblem having a unique significance. The peace sign (two fingers up, palm facing outward), or OK sign (thumb up, hand in fist) for instance, have distinct meanings in various cultures (Matsumoto & Hwang, 2013). Emblems are frequently thought in

language classes. *Pantomimes* are a type of communication that do not involve speaking. They involve using gestures and body movements to convey actions, objects or even entire narratives. They are commonly used in storytelling or games where speaking is not allowed. *Signs* are also used with no discourse. They are symbolic motions of hands with linguistic functions such as word structure, sentence structure and phonemics. They are often used in situations where speaking is not or appropriate and provide a non-verbal means of communication (Stam, 2013).

Empirical Studies

In a study related to gestures' categorization, Gazzola et al., (2019) conducted a qualitative study on the features of didactic gestures used in mathematics and physics classes of a secondary school. In this paper, they analyzed the Study and Research Path (SRP) progression including mathematics and physics through the Anthropological Theory of Didactics (ATD) called dialectics and also how the dialectics work in a SRP. The researchers concluded that there are hardships for using dialectics of a SRP in secondary school and despite the hardships, the students do some gestures regarding SRP.

Also, another study was carried out regarding the didactic gestures on remote teaching at covid-19 pandemic times (Brito et al., 2022). The study aimed at figuring out the teacher's sense of didactic gestures on Emergency Remote Teaching (ERT). Hence, an online questionnaire by the use of Likert scale was utilized to collect and analyze the data. The findings revealed that the participants are not cognizant of the students' learning in new scenarios. They also appraise the reciprocal action with students through dialogue and questioning and they need to study harder in order to help students in finding the best way of learning regarding ERT. They concluded that technologies as interactional and educational instruments should be included in order for the teachers to improve their new educational expertise.

In addition, Wilson et al., (2014) conducted a study on the teachers' discipline-specific gestures and implications for disciplinary literacy instruction. The researchers developed categories that could be taken into account as the subcategories of iconic gesture. These subcategories include (a) Action gestures which is also called mimic gesture; (b) Magnitude gestures used to show a large or small distance, size and amount by stretching hands/arm; (c) Movement gestures as the use of hands/arm to represent an observable entity by moving one hand around a nonmoving hand; (d) Shape gestures used when the arm/hands show the physical pattern of a form or figure and (e) Spatial position gestures used to indicate an observable thing in a particular place concerning another observable thing. Although, the last three studies report findings on gesture, they are either not related to the profession of teaching or have been conducted in emergency cases such as Corona pandemic. The last one, (Willson et al, 2019) however, draws on previous categorizations of gesture to develop more components for iconic gesture.

Furthermore, one experimental study carried out by Dai and Li (2021) examined the impact of teachers' gestures in classroom. The aim of their study was to find out how teachers can affect students in the classroom by using gestures. The researchers compounded gesture analysis and conversation analysis in their method using three videos transmitted to YouTube. The participants were 20 first-grade students, 22 second-grade students and 20 third-grade students. The findings of their study revealed that gestures can help students focus on the classroom, show more enthusiasm to learn, keep positive habits and also they seem to act as scaffolding so that the teacher can manage the materials in the classroom. Moreover, the researchers hoped to make the students know the proper meanings of gestures for it makes them participate in the classroom with more speed and initiative.

Further, in an inquiry conducted by Alibali et al. (2019), the researchers considered the interaction of teachers and students in the classroom by using gestures and the mutual understanding between them. They also focused on the way teachers can help students to contribute to the classroom discourse by using gestures. In their research, they examined the lessons from videos containing three corpora. Corpus 1 was the one with six-grade lessons in mathematics, corpus 2 consisted of high-school lessons focusing on geometry and corpus 3 on pre-engineering lessons. The researchers proposed that in addition to the teachers supporting students to contribute to the classroom discourse, they also make the contributions salient for other students. Therefore, they concluded that by using gestures the teachers

develop shared understanding with students. Although the nature of the experimental studies reported above led to the positive outcomes in terms of gesture, they have not been conducted in Iranian context and there is no trace of considering if novice and expert teachers vary in the use of different gesture types.

More importantly, in a study investigating the gestural manifestation of intensifiers in iconic, metaphoric and beat gestures, the investigators asked 30 native speakers of Persian to listen to a series of stories having several intensives written in Persian and then narrate them again. The materials used in this study were four stories in audio format containing 250-300 words. Six intensives such as very, really, rather, too, completely and so were used in each story. The findings of their study demonstrated that using intensive with a literal statement makes the use of iconic or beat gesture more probable than when no intensive is used in the sentence. Also, using intensives with a metaphoric statement makes the use of metaphoric or beat gestures more probable than using statement with no intensive. The findings of their study implied that gestures utilized with intensives in literal and metaphorical statements can have an emphatic communicative performance. So, using gestures with intensives in literal and metaphorical statements can be illustrated from a cognitive or communicative viewpoint though both of them can work simultaneously. They concluded that the manner intensives manifested in literal sentences is the same as the manner they are manifested in metaphoric sentences (Khatib-Zadeh, et al. 2023).

Finally, Bosmanus and Bejune (2022) worked on research with the objective to recognize teacher's supportive gestures for self-regulated education and to continue initial task on the format of innovative cooperation between students and on the support of teacher's meditative action in the classroom. This study was done with a cooperative research method in Switzerland and England. The research was conducted in several sessions by teachers. Participations were 7 to 9-year-old children instructed in three classes. The research tools consisted of lesson observation and group interviews. The study provided a more comprehension of the skilled teacher's gestures, causing a very effective classification, with consequences for early and continuing training of teachers.

According to the previous studies that were conducted in the field of gestures and their shortcomings and weaknesses mentioned above, since previous studies were not conducted in Iran aiming to fill the gap regarding a classification of gesture functions for novice and expert teachers, the researchers decided to conduct a qualitative research to identify differing functions associated to gesture among novice and expert teachers in terms of qualitative models.

Method

This section describes a qualitative approach to draw out the gesture functions novice and expert teachers express, utilize and the perspectives they hold toward them in the classroom. Therefore, to obtain insights into the gesture functions expert and novice teachers express and use in the classroom, and the perspectives of Iranian teachers, a series of independent interviews before the observations, observations and post-observation interviews were conducted by researchers to develop models of classroom gesture for Iranian novice and expert teachers.

Participants and Setting

The participants of this study were selected purposefully from among English novice and expert teachers teaching at three institutes and 15 English classes in Bandar Abbas city. First, the teachers were categorized into novice and expert groups based on their teaching experience and the features suggested by Tsui (2003). Therefore, teachers with less than four years of experience who met Tsui (2003) characteristics were considered novice. Experienced teachers, however, had more than 7 years of experience. Overall, 15 novice and 14 expert teachers met the criteria. Since in the current study, initial interviews, observations and post-observation interviews were held, out of 15 novice teachers, 8 teachers, and out of 14 experts, 10 were interviewed regarding gesture functions until data saturation was achieved. Afterwards, 15 classes of differing proficiency levels were observed through direct non-

participant observation. Finally, 37 post-observation interviews were held to help clarify on confusing observations.

Instruments

Three instruments were employed in the present to categorize different gesticulations used by teachers and check their perspectives toward them in EFL classes to postulate models of gesture for novice and expert teachers. They include initial interviews, observations and post-observation interviews.

Initial Interviews

In order to find out gesture functions by novice and expert teachers, a 3-session semi-structured interview was arranged. In the first session, the interviewer and interviewees were acquainted. In addition, the interviewees were informed that in the second session, they are kindly required to brainstorm their ideas about gestures types they employ in class. In fact, the first session meant to break the ice among the interviewer and interviewees and inform the participants about the interview topic in the following session. In the second session, the real semi-structured interviews were run and the researchers used some general questions to make teachers speak their mind as to the gesture functions they anticipate using in their classes. In the third session, the synopsis of the points discussed by the participants were handed to them to make comments regarding the authenticity of the summary. Overall. At the third session, the inconsistencies and ambiguities were discarded.

Observations

Video recordings and direct non-participant observation were employed to realize the profile of gestures teachers used in class. Kostera (2007) defined direct non-participant participation as a strategy for observation in which the researcher takes the role of a guest or an outsider and does not interfere in the activity being run. Two observers entered each class and they meticulously described the gestures used in classes. At the end of each session, the two observers who were qualified English instructor checked their notes and discussed them with each other in order to reach consensus with respect to the movements they observed and the recordings they watched.

Post Observation Interviews

Post-observation interviews were run with teachers to resolve inconsistencies and ambiguities raised among the observers after checking their notes and the recordings. In other words, the purposes for which teachers used a particular gesture in class was inquired about after playing the recordings for the teachers. In fact, teachers watched their own gestures and explained the intention behind them.

Data Collection Procedure

To collect the data in this qualitative study, participants were invited for a 3-session interview. In the first session after breaking ice with the participants, the interview topic was given to each participant in order for them to have some time and space to ponder about and discuss it soundly in the second session. In the second session, participants discussed their viewpoints according to the questions asked in the semi-interview phase. The interview was recorded in the form of audio recordings of the participants and two interviewer took notes of the main points in a manner that nothing was missing. Each interview lasted roughly 15 to 20 minutes.

At the third session, the gist of the main points summarized were handed to the participants and they commented on their own summaries and added/ omitted points to the interpretations done by the researchers. This strategy known as member checking accounted for credibility of the findings. This point is worth mentioning that the interviewers used the exact words by the participants to maximize the delivery of proper meanings and concepts.

In the next step, two observers used direct non-participant observation to observe novice and expert teachers' classes and the video recordings were made of each classroom in order to analyze gestures that the teachers produced. The observers took a neutral position and did not interfere in the teaching process. They merely took notes of the gestures produced by the teachers. Finally, the notes of the observers were checked regarding the consistency and meaning with the recording. In the final step, teachers' viewpoints were checked regarding the confusing gesture types reported by the observers. In this stage, the video recordings of those specific cases were shown and played for the teachers and they were asked to clarify on them.

Data Analyses Procedure

In the qualitative research, data collection and analysis are done simultaneously. In other words, after each interview and observation was made, the content of them was transcribed, read, reread and coded for the meaningful information according to Corbin and Strauss (2008) systematic steps of open, axial and selection coding. After doing the same procedure for all the recordings, the researchers started to organize and reduce the data. At this stage, the irrelevant codes were omitted and the relevant ones were categorized. It is worth noting that coding was done separately by three coders. Put it differently, the first coder went through the data and labeled as many codes as he could. Afterwards, he started reducing the codes into meaningful categories. At this point, the second coder was given 20 percent of the data and the labels made by the first coder. He was supposed to go through the data and apply the same labels without looking at the first coders' data analysis and interpretation. In the meanwhile, the third coder checked the consistency of the label among the first and second coders and admitted that consistency was achieved in 86 percent of the cases. The researchers followed this manner to account for dependability of the data. After that, the categories were once again checked to search for the similar affinities among them. Finally, the similar affinities and categories were attributed to the meaningful themes to propose models of gesture for novice and expert teachers.

Results

The results of the present study on the manifestation of Iranian novice and expert teachers' gesture functions in accordance with the interviews, observations and post observation-interviews are presented as follows:

Novice Teachers' Gesture Functions

In order to figure out the Novice Teachers' gesture functions and categories, the researchers employed interviews and observations. In addition, the researchers added a Post observation-interview in cases where the observations were not tangible to provide more insights into the study.

Table 1

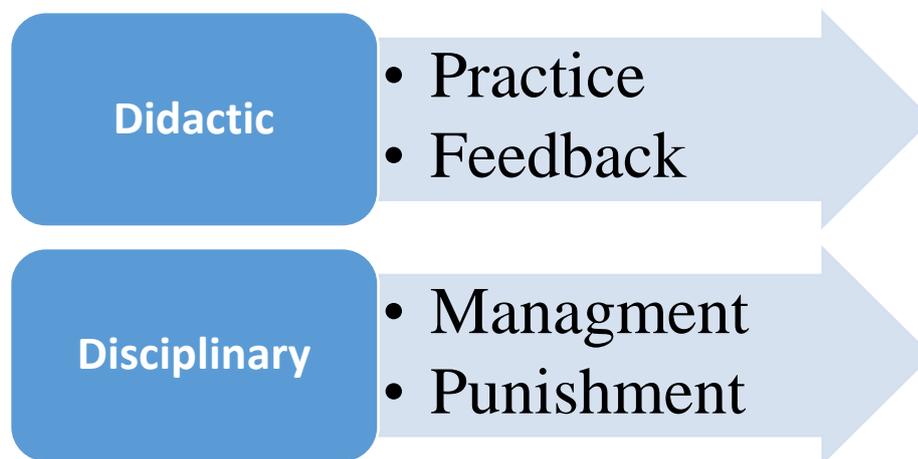
Novice Teachers' Themes and Categories

Themes	Didactic		Disciplinary	
Categories	Practice	Feedback	Management	Punishment
Novices	1. to say hello	1. to show confusion	1. to wait/hold on time	1. To show anger, disbelief
	2. to write down something	2. to show he does not believe what he says	2. to calm down the students	2. to show frustration
	3. to say sit down	3. to show she is shocked or amused	3. to show silence	3. to show disappointment
	4. to say stand up		4. to command/to order/ listen/silence	

The figure below also summarizes the major themes and categories of novice teachers' gesture functions:

Figure 1

The Major Themes and Categories of Novice Teachers' Gesture Functions



Practice

Observation 1: It was observed that the teacher took a pen and wrote something on the air or pointed to writing with a pen.

Post observation interview 1: When the teacher was asked why she took a pen and write something in the air or made students write with a pen, she answered "I did it because I wanted the students to write down the exercises in the book".

Observation 2: It was also seen that the teacher held her two hands down while her palms were faced to the ceiling.

Post observation interview 2: When the teacher was asked for what reason she held her two hands down while her palms to the ceiling, she responded that she wanted to have students stand up.

Observation 4: It was observed that when the teacher entered the class and the students stood up, she raised her two hands and lowered them at the same time.

Post observation interview 4: Another response to the gesture the teacher executed while entering the classroom by raising her two hands and lowering them at the same time was to ask students to have their seats.

Interview: Before observing the teachers' gestures, some of them were interviewed to grasp that if they use gestures in their classrooms and why. One interviewee responded that when she wants to say yes, she nodes her head from top to the bottom or when she wants to say no, she brings his index finger up and shakes it from left to right and right to left and nods her head from left to right and right to left.

Feedback

Observation 1: It was observed that the teacher's eyes became wide open and blank when one of the students spoke about something that was absolutely unfamiliar to the teacher.

Post observation interview 1: When the teacher was asked why his eyes became wide open and blank he responded, "I was shocked by such a question that the student asked me".

Observation 3: Another observation was that the teacher raised his eyebrow up when the students were discussing a subject in the class.

Post observation interview 3: The teacher's response for the question that why he raised his eyebrow up while listening to the students' remarks was that I was shocked and surprised by what the students said.

Interview: In an interview conducted with novice teachers by the researcher to know that whether they use gestures in their classrooms and for what reason, one of them responded, "When I am shocked by a student's asking question, my eyes become big, open and blank." Another response was that, "I raise up just one eyebrow when the students talk about a subject that I do not believe it and make them understand it.

Didactic

After organizing and reducing the above-mentioned categories, the researchers merged them into a single heading called didactic. In fact, the didactic theme embodies practice and feedback.

Table 2

Didactic Theme for Novice Teachers

Themes	Didactic	
Categories	Practice	Feedback
Novices	1. to say hello 2. to write down something 3. to say sit down 4. to say stand up	1. to show confusion 2. to show he does not believe in what he says. 3. to show she is shocked or amused

Management

Observation 2: It was also observed that the teacher pointed to her left wrist with index finger of her right hand to remind students be aware of time and there is not much time left until the end of the class and they have to finish the topic.

Observation 3: The teacher was observed to raise her hand as soon as he entered the class.

Post observation interview 3: In response to what has been observed as the teacher raised her hand entering the classroom, he said "when I enter the class from the very first moment I just see the students talking loudly or struggling with their classmates I raise my hand to calm them down."

Observation 5: In another observation of the teacher's gestures in the classroom, when one of the students wanted to say something, the teacher took his hand to the back of his ear.

Post observation interview 5: The teacher was asked why he brings his hand to the back of his ear, the answer was to tell the other students that he cannot hear them and to command them be silent or in another time when he is waiting for the answer to the question he has asked from the students.

Punishment

Observation 1: The teacher was observed to draw his eyebrows together while teaching.

Post observation interview 1: When the teacher was asked for what reason he drew his eyebrows together, he responded "to show frustration and anger at the students' inappropriate conducts while he is teaching them."

Observation 2: It was observed that the teacher pushed his chin out and had a scowl on his face when he asked an easy question and no student could answer it, and it was clear that he is dissatisfied with their performance.

Disciplinary

The researchers, after arranging and making a reduction in the above-mentioned categories, incorporated them into a different heading named disciplinary. As a matter of fact, the disciplinary theme contains management and punishment.

Table 3

Disciplinary Theme for Novice Teachers

Themes	Disciplinary	
Categories	Management	Punishment
Novices	1. to say wait/hold on 2. to say look at the time 3. to calm down the students 4. to show silence 5. to command/to order/ listen/silence 6. to Tell SS keep their papers secret	1. To show anger, disbelief 2. to show frustration 3. to show disappointment

Expert Teachers’ Gesture Functions and Categories

Observations and interviews were among the main tools through which the expert teachers’ gestures functions were gathered. To explain the hard to grasp observations, the researchers also referred to post observation interviews they made and sought justification on the part of the teachers whose classes were recorded.

Table 4

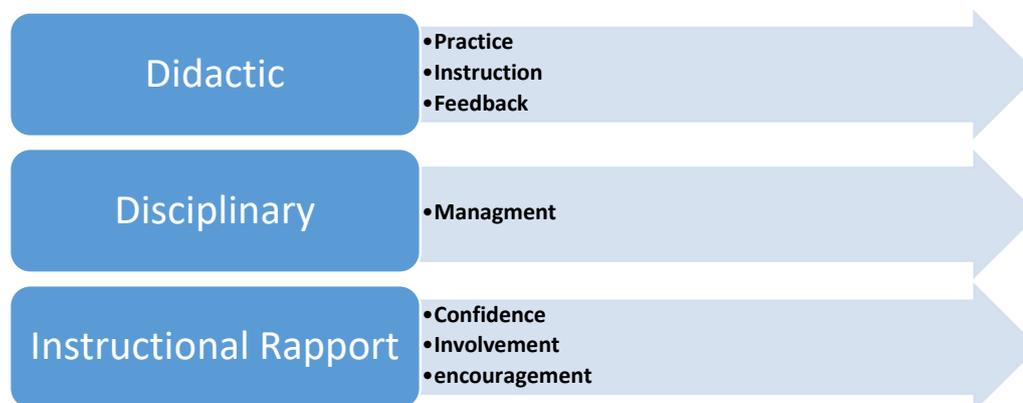
Themes and Categories of Expert Teachers’ Gesture Functions

Themes	Didactic			Disciplinary	Instructional rapport		
Categories	Practice	Instruction	Feedback	Management	Confidence	Involvement	Encouragement
Experts	1. to say I do not know 2. to show superiority 3. to show unwillingness or indifference 4. to answer altogether 5. to ask SS work in groups 6. to drill sentence forms or stress patterns	1. To teach present tense 2. to teach future tense 3. to teach past tense	1. To correct students’ mistakes	1. To say stop 2. to show I am keeping my eyes on you 3. to show be silent 4. to control the class	1. to show confidence enough to control the class 2. to make students trust teacher 3. to show confidence	1. to show it is your turn 2. to show it is my turn 3. to show silence: to engage and listen 4. to take notes by gestures 5. blink: hold the attention of the students	1. To say perfect 2. To say well done 3. To say good luck/wishing for victory 4. To show silence/encouragement 5. to convey a variety of

Here below you can find the major themes and categories of expert teachers’ gesture functions:

Figure 2

The Major Themes and Categories of Expert Teachers' Gesture Functions



Practice

Observation 1: It was observed that the teacher opened his 5 fingers towards the students and said a 5-word sentence and by saying each word pointed to one of his fingers that was open with another hand while teaching sentence patterns. “We can have a sentence like: I live in the UK.” said the teacher.

Post observation interview 1: After observing that the teacher opened his 5 fingers towards the students and said a 5-word sentence and by saying each word pointed to one of his fingers that was open with another hand, he was asked for the reason and he answered, “I wanted to drill sentence forms and stress patterns to make it easier for students to understand.”

Observation 3: It was also observed that when the teacher was asking for students’ opinion about a particular subject in the class, and when he wanted to say I like that opinion and approve it, he brought his thump up, on the contrary, when he wanted to say I do not like or I do not approve it, he brought his thump down.

Observation 6: It was observed that the teacher pursed her lips during the class while some of the students asked a question.

Post observation interview 6: When the teacher was asked what for she pursed her lips, she said that sometimes she wants to show disapproval and disagreement to the students when they ask her for some unreasonable things.

Interview: Before observing the teachers’ gestures in the classroom teaching, the researcher interviewed some teachers to grasp if they use gestures in their classrooms and why. One interviewee responded that, “when I want to say to the students I do not know this subject, I hold my hands from down to up while my 5 fingers are open towards myself”. Another interviewee responded that, “I raise chin a little bit when I want to show my superiority”. Another response was that, “I open my hands and bring them together when I ask students to answer altogether”

Instruction

Observation 2: In another session of grammar class, the teacher while talking about future tense opened all her 5 fingers and pointed to the ground.

Observation 3: It was also observed that when the teacher was talking about present tense, she pointed the index fingers of both her hands to the ground while the other fingers were closed.

Post observation interview: The teacher was asked for answering why she used her fingers and made gestures while teaching grammar, the answer was, “Because grammar is complicated for most students and some of them are confused, I use gestures to make it more understandable for them.”

Feedback

Observation 1: It was observed that the teacher moved his thumb to the left or right and clenched his four other fingers.

Post observation interview 1: The teacher responded when being asked why he moved his thumb to the left or right and clenched his four other fingers that he wanted to correct students’ mistakes during answering the exercises.

Interview: one of the teachers expressed that when students do writing exercises, I moved around and checked their sentences grammatically, and in case, they are grammatically wrong, I point to their mistakes by my index finger.

Didactic

Following the organization and reduction of the above-mentioned categories, they were merged into a single title called didactic. Here, the didactic theme includes practice, instruction and feedback.

Table 5

Didactic Themes and Categories of Expert Teachers

Themes	Didactic		
Categories	Practice	Instruction	Feedback
Experts	1. to say I do not know 2. to show superiority 3. to show unwillingness or indifference 4. answer altogether 5. to ask SS work in groups 6. to drill sentence forms or stress patterns 7. to drill sentence forms or stress patterns	1. To teach present tense 2. to teach future tense 3. to teach past tense	1. To correct students’ mistakes

Management

Observation 1: According to the observation, the teacher put his index finger onto his lips and made a Hush sound during the class when the students were talking to each other to ask them for silence.

Observation 2: The researcher observed that the teacher moved the palm of his hand in the opposite direction towards the students when one student was talking about a subject.

Post observation interview 2: The teacher was interviewed to answer why he moved the palm of his hand in the opposite direction towards the students, he said he wanted to say that student stop explaining the subject and ask another one to continue the rest of it.

Observation 3: It was observed that the teacher held her index and middle fingers towards his eyes when she asked students to write a composition in the classroom.

Post observation interview 3: When the teacher was asked why she held her index and middle fingers towards her eyes before students start writing composition in the classroom, she responded that “I made this gesture to show students indirectly that I am keeping my eyes on you, and watching you.”

Interview: Before observing the class, the researcher interviewed with the teachers if they use any gestures in their classes and for what reason and one of them answered that “when I want to control the classroom, I get in my personal space, walk around, and I think I am ok with being next to students, check upon them, ask them questions, write something down in their books and stand next to them.”

Disciplinary

After reducing and arranging the categories, the researcher merged it into a single title identified disciplinary. In fact, the disciplinary theme consists of management for expert teachers, however, for novice teachers it includes management and punishment.

Table 6

Disciplinary Theme and Categories for Expert Teachers

Theme	Disciplinary
Category	Management
Expert	1. To say stop 2. to show I am keeping my eyes on SS 3. to make SS be silent 4. to control the class

Confidence

Observation 1: It was observed that the teacher closed his eyes partly or narrow his eyes during teaching.

Post observation interview 1: When the teacher was asked for giving the reason of closing his eyes and narrowing them during teaching, the answer was to show that he is determined, focused and ready.

Interview: The interview was conducted by the researchers with teachers to grasp that whether they use any gestures in the classroom and if there is a special reason beyond that. The interviewee responded that “I do not rush. I think students do not trust teachers who walk around and have fast movements. I try to be slow as much as possible to make students trust me.” Another interviewee said, “I hold eye contact with students. If you do not have eye contact, students may say that you are uncomfortable and are not confident enough. Students would respect teacher more and they would feel more comfortable in the class, because you are confident enough to control the class.”

Involvement

Observation 1: It was observed that the teacher used her whole hand to gesture towards students when the students were doing the exercises one by one.

Post observation interview 1: In response to the question why the teacher used her whole hand to gesture towards students when they were doing the exercises, the teacher said “this is a gesture when I want to inform a student it is his/ her turn to answer and to involve them in class activities.”

Observation 2: It was also observed that the teacher used her whole hand to gesture towards herself when she was doing a conversation by playing a game with students in the classroom.

Post observation interview 2: When the teacher was asked why she used her whole hand to gesture towards herself while doing a conversation by playing a game with students in the classroom, the answer

was “this is a gesture when I want to inform the students it is my turn to answer when working on a conversation.”

Interview: In an interview with teachers in order to grasp if teachers do any gestures in their classroom teaching before observing the classes, one of the interviewees said “when I want to hold the attention of the students in the class sometimes I twinkle with my eyes.” Another teacher responded, “Yes, I close my mouth and hold my index finger in my closed mouth to make them get quite, listen and engage in class activities.”

Encouragement

Observation 1: According to what has been observed during the class, the teacher put the thumb and index fingers of his both hands close to each other while the other three fingers were up.

Post observation interview 1: The teacher after being interviewed for what reason he put the thumb and index fingers of his both hands close to each other while the other three fingers were up said, “I asked a difficult question and I did not expect the students to answer it, then when some of them answered it I did that gesture to say it is perfect and encourage them.”

Observation 2: The teacher closed the four fingers of her hands and raised her thumbs and held both of her hands towards her body and shook her thumbs.

Post observation interview 2: After interviewing with the teacher why she closed the four fingers of her hands and raised her thumbs and held both of her hands towards her body and shook her thumbs, it was grasped that she meant to say well done for the students’ progress in speaking.

Interview: In an interview with expert teachers in order to know if they use gesture while teaching and why, one of them answer that “I sometimes cross my fingers, I mean I hold my index and middle fingers together to show wishing for victory and good luck in order to encourage them study more.” Another interviewee responded, “I often come to the class with smile to convey a variety of emotions and students feel more comfortable from the very beginning.”

Instructional Rapport

The researcher, following the organization and reduction of the aforesaid categories, combined them to a heading called instructional rapport. In this theme, the instructional rapport embodies confidence and involvement and encouragement.

Table 7

Instructional Rapport Themes and Categories of Expert Teachers’ Gestures

Themes	Instructional rapport		
	Confidence	Involvement	Encouragement
Experts	1. to show he is confidence enough to control the class 2. to make students trust teacher 3. to show confidence	1. to show it is your turn 2. to show it is my turn 3. to show silence: to engage and listen 4. to take notes by gestures 5. blink: hold the attention of the students	1. To say perfect 2. To say well done 3. To say good luck/wishing for victory 4. To show silence/encouragement 5. to convey a variety of emotions

The Overall Qualitative Model of Gesture Functions for Teachers

In order to answer the second research question, themes and categories of novice and experienced teachers were combined and presented in the following graph:

Figure 3

The Overall Qualitative Model of Gesture Functions for Teachers



Discussion

This qualitative inquiry aimed at investigating gesture functions among Iranian Novice and expert teachers. Although the overall results of this study indicated common themes among novice and expert teachers as to gesture type and functions, the discrepancies which emerged out of interviews and observations made the practices and perceptions of novice and experts some somewhat different. Novice teachers, on the one hand, employed gestures for didactic (practice & feedback) and disciplinary (management & punishment) purposes. Expert teachers, on the other, utilized gestures for didactic (practice, instruction & feedback), disciplinary (Management) and instructional rapport (confidence, encouragement & involvement) goals.

Despite the fact that didactic theme has unanimously emerged in both novice and expert teachers' use of gesture, novice teachers did not employ it for instruction and used it to signal practice and feedback. Expert teachers, however, employed instruction, practice and feedback under the didactic theme which implies the versatility of gesture functions at the disposal of expert teachers. One justification as to unemployment of gesture for instruction could be, as Tsui (2003) mentioned and the interviews and observation corroborated, the dependence of novices on the syllabus and their mere pursuit of the aims and purposes of it which may not have then given them adequate space for independence and freedom of action in the classroom. Normally, as observed among the practices of experts, it can be assumed that instruction can be facilitated through non-verbal mode of language, in general, and gesture in particular and this is the experience of expert teachers that make them flexible users of a combination of verbal and nonverbal strategies while following the aims of the syllabus. The use of gesture as a didactic goal corroborates Gazzola et al., (2019) findings, yet, it refuses Brito et al., (2022) results. This contradiction is partly attributable to the fact that this paper adds practice and feedback as two more aspect of didactic gesture. Nonetheless, previous studies took didactic as equal as instruction. In other words, this paper expands the building blocks of the term didactic from merely being used for instruction to practice which enhances learning and feedback which corrects misunderstanding and helps the internalization of sound concepts in the mind of a learner; all of which can be achieved through gesture in the classroom.

In addition, the findings demonstrated that disciplinary is the second common theme among both novice and expert teachers. It is worth mentioning that disciplinary theme does not embody punishment for expert teachers which might be due to the fact that experts seem more likely to involve their learners and make them engaged. Conversely, Part of novice teachers' tendency towards punishing

learners might be due to their lack of experience and the misconception that the more students' activities are controlled and picked upon, the better they perform, however, the new generation of learners appeals towards more friendly and dynamic modes of teaching. Therefore, as opposed to novice teachers, a humanistic aspect of gesture is at the disposal of expert teachers. Hence, it is speculated that experts due to their experience and the mindset that punishment can be replaced by encouragement and involvement tend to use rapport as a wise and efficient gesture function.

Consequently, the third emerging theme unique to expert teachers is rapport. Put it differently, they employ gesture to hint confidence, involvement and encouragement as the main components of rapport. The results of this theme partly agree with Dai and Lee (2021). These findings can be accounted, as observed in experts' use of gesture, on the ground that after having encouraged learners through a combination of gesture types, they become more attentive to tasks and their involvement augments in the classroom. As a result, expert teachers are aware that in case they boost rapport among their learners, they can smoothly instruct them with higher chances of the proper delivery of the syllabus content. Nevertheless, rapport is absent in the purposes for which gesture has been used by novice teachers because they might disregard the fact that learners need to be encouraged and involved rather than being managed or punished. As to pedagogy, the results have offered novel insights as to the use of gesture which can be employed in EFL and ESL classroom to maximize the delivery of syllabus content and hence adds new components to the available body of information in the existing literature on gesture.

Conclusion and Implications

This study provided a general understanding of how Iranian novice and expert teachers used gestures in their classes. As a result, the emerging model of gesture as a local model in Iran can be a novel achievement in this regard, because it beautifully demonstrates how gestures can be at the service of pedagogy in the classroom beside the verbal communication. The overall model of gesture functions contributes to the available body of research on gesture which has certain ramifications for teacher training and in-service courses as it demonstrates the appropriate utilization of gestures in the classroom which results in teachers' professional development. In other words, the model driven from the data can be presented to novice teachers in order to familiarize them with gesture functions and hence empower them to use gestures flexibly in their classes. In addition, in-service courses can be offered to teachers to update them with the latest findings in this respect. Besides, gestures are not only useful for communicating complex abstract ideas, but, they can also be used to create rapport and encouragement in the class. More significantly, the results of the present study have particular and practicable indications for student teachers or prospect teachers in order to assist them to manage and instruct their learners more effectively using proper gesture types in the classroom.

Apart from its implications, this study has addressed only a qualitative approach using novice and expert teachers from Bandar Abbas province which makes its finding context-sensitive. Therefore, the results of this study cannot be taken as firm evidence for other settings unless the components of the model can be tested quantitatively with larger sets of data. As a result, future studies of gesture can either take an experimental approach to find out the efficacy of the emerged themes/ categories or test the generalizability of the components of the model in a survey developed vis-a-vis the qualitative models.

Acknowledgement

The authors express their sincere gratitude to the editor and anonymous reviewers of the Iranian Journal of English for Academic Purposes for their invaluable feedback.

Declaration of Conflicting Interests

The authors declare that they have no conflicting interests regarding the publication of this paper.

Funding Details

There are no financial or personal relationships with other people or organizations that could influence the authors' work.

References

- Alibali, M. W., A. G. Young, N. M. Crooks, A. Yeo, M. S. Wolfgram, I. M. Ledesma, M. J. Nathan, R. Breckinridge Church, and E. J. Knuth. (2013). "Students learn more when their teacher has learned to gesture effectively." *Gesture*, 13 (2): 210–233. doi:10.1075/gest.13.2.05ali.
- Alibali, M. W., Nathan, M. J., Boncoddio, R., and Pier, A. (2019). Managing common ground in the classroom: teachers use gestures to support students' contributions to classroom discourse. *ZDM (2019) 51:347-360*. <https://doi.org/10.1007/s11858-019-01043-x>.
- Babelan AS. (2012). The correlation between verbal and non-verbal communication and its relationship with the students' academic success. *Journal of School Psychology: 46–61*.
- Bates, E. (1976). *Language and context: The acquisition of pragmatics*. New York: Academic Press
- Bosmans, D., & Bejune, H. E. P. (2022). Teachers' professional gestures which support self-regulated learning in primary school. *Journal for Educators, Teachers and Trainers, Vol. 13(5)*. 28-38. <https://doi.org/10.47750/jett.2022.13.05.003>
- Brito, C. A. F., Da Costa, N. M. L., & Diniz, S. N. (2022). New didactic gestures on emergency remote teaching: Lessons learned in education at Covid-19 pandemic times. *Revista Ibero-Americana De Estudos Em Educacao*, 51-69. doi:10.21723/riaee.v17i1.14989
- Dai, W., & Li, Y. (2021, August). Investing the effects of teachers' gestures in class. In *2021 International Conference on Modern Educational Technology and Social Sciences (ICMETSS 2021)* (pp. 222-226). Atlantis Press. doi: 10.2991/assehr.k.210824.049
- Ekman, P., & Friesen, W. V. (1969). The repertoire of nonverbal behavior: Categories, origins, usage, and coding. *semiotica*, 1(1), 49-98. <https://doi.org/10.1515/semi.1969.1.1.49>
- Freedman, N. (1977). Hands, words, and mind: On the structuralization of body movements during discourse and the capacity for verbal representation. *Communicative structures and psychic structures: A psychoanalytic interpretation of communication*, 109-132. DOI:10.1007/978-1-4757-0492-1_6
- Gazzola, M. P., Otero, M. R., & Llanos, V. C., (2019). The characteristics didactic gestures of a study and research path involving Mathematics and Physics at secondary school. Argentina: *European Journal of Education Studies*. 6(7). DOI:10.46827/EJES.V0I0.2704
- Goldin-Meadow, S. (2006). Talking and thinking with our hands. *Current directions in psychological science*, 15(1), 34-39. <https://doi.org/10.1111/j.0963-7214.2006.0040>
- Iverson, J. M., & Goldin-Meadow, S. (1997). What's communication got to do with it? Gesture in children blind from birth. *Developmental Psychology*, 33(3), 453–467. <https://doi.org/10.1037/0012-1649.33.3.453>
- Iverson, J. M., & Goldin-Meadow, S. (1998). Why people gesture when they speak. *Nature*, 396(6708), 228-228. doi: 10.1038/24300. PMID: 9834030.
- Iverson, J. M., & Goldin-Meadow, S. (2001). The resilience of gesture in talk: Gesture in blind speakers and listeners. *Developmental Science*, 4(4), 416_422. Doi: 10.1111/1467-7687.00183
- Kamiya, N. (2018). The effect of learner age on the interpretation of the nonverbal behaviors of teachers and other students in identifying questions in the L2 classroom. *Language Teaching Research*, 22(1), 47-64. doi:10.1177/1362168816658303.
- Kendon, A. (1988). How gestures can become like words. In F. Poyatos (Ed.), *Cross-cultural perspectives in nonverbal communication* (pp. 131–141). New York: Hogrefe.

- Kendon, A. (2004). *Gesture: Visible action as utterance*. Cambridge, UK: Cambridge University Press.
- Khatin-Zadeh, O., Farsani, D., Hu, J., Eskandari, Z., & Banaruee, H. (2023). Gestural embodiment of intensifiers in iconic, metaphoric, and beat gestures. *Behavioral Sciences, 13*(2), 174. <https://doi.org/10.3390/bs13020174>.
- Kita, S., Van Gijn, I., & Van der Hulst, H. (1998). Movement phases in signs and co-speech gestures, and their transcription by human coders. In *gesture and sign language in human-computer interaction* (pp. 23-35). Springer Berlin Heidelberg. <http://dx.doi.org/10.1007/BFb0052986>
- Kostera, M. (2007). *Organizational ethnography: Methods and inspirations*. Lund, Sweden: Studentlitteratur
- 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. doi:10.1080/10350330.2017.141216.
- Liu, Q., Zhang, N., Chen, W., Wang, Q., Yuan, Y., & Xie, K. (2022). Categorizing teachers' gestures in classroom teaching: from the perspective of multiple representations. *Social Semiotics, 32*(2), 184-204. DOI: 10.1080/10350330.2020.1722368.
- Matsumoto, D., & Hwang, H. S. (2013). Emblematic gestures (emblems). *The Encyclopedia of Cross-Cultural Psychology, 2*, 464-466. doi:10.1002/9781118339893.wbecp188.
- McNeill, D. (1985). So you think gestures are nonverbal?. *Psychological review, 92*(3), 350. DOI:10.1037/0033-295X.92.3.350
- McNeill, D. (1992). *Hand and mind: what gestures reveal about thought*. Chicago: University of Chicago Press.
- McNeil, N. M., Alibali, M. W., & Evans, J. L. (2000). The role of gesture in children's comprehension of spoken language: Now they need it, now they don't. *Journal of Nonverbal Behavior, 24*, 131-150. <https://doi.org/10.1023/A:1006657929803>
- McNeill, D. (2006). Gesture and communication. *Concise Encyclopedia of Pragmatics*. New York: Elsevier, 299-307. DOI:10.1016/B0-08-044854-2/00798-7
- Miller, P. W., (1986). *Nonverbal communication* (2nd ed.). Washington, D.C.: National Education Association.
- Mortazavi M. (2013). Meta-analysis of communication patterns in math learning journal article. *Journal of Educational Technology, 9*(2): 155-64. Persian.
- Najafi T, Rahmazade A. (2013). The relationship between communication skills and educational effectiveness of teachers of girls in Valiasr Technical College in Tehran. *Journal of media studies, 8*(4): 193-206. Persian.
- Pi, Z., Y. Zhang, F. Zhu, K. Xu, J. Yang, and W. Hu. (2019). "Instructors' pointing gestures improve learning regardless of their use of directed gaze in video lectures." *Computers & Education 128*: 345-352. doi:10.1016/j.compedu.2018.10.006.
- Pinskaya, M., A. Ponomareva, and S. Kosaretsky. (2016). "Professional development and training for young teachers in Russia." *Educational Studies 2*: 100-124. doi:10.17323/1814-9545-2016-2-100-124.
- Rimé, B., & Schiaratura, L. (1991). Gesture and speech. In R. S. Feldman & B. Rimé (Eds.), *Fundamentals of nonverbal behavior*. New York: Press Syndicate of the University of Cambridge.
- Stam, G. (2013). Second language acquisition and gesture. In C. A. Chapelle (Ed.), *The encyclopedia of applied linguistics*. Oxford: Blackwell Publishing Ltd. DOI:10.1002/9781405198431.wbeal1049

- Strauss, A., & Corbin, J. (2008). *Basics of qualitative research: Techniques and procedures for developing grounded theory*. Thousand Oaks, CA: Sage Publications, Inc
- Tsui, A. B. M. (2003). *Understanding Expertise in Teaching Teachers: Case Studies of ESL*. Cambridge: Cambridge University Press. <https://doi.org/10.1017/CBO9781139524698>
- Wang, X., R. Bernas, and P. Eberhard. (2004). "Engaging ADHD students in tasks with hand gestures: A pedagogical possibility for teachers." *Educational Studies* 30 (3): 217–229. doi:10.1080/0305569042000224189.
- Watzlawick, P., Beavin, J.H., Jackson, D.D. (1967). *Pragmatics of Human Communication*. New York, NY: W. W. Norton.
- Wilson, A. A., Boatright, M. D., & Landon-Hays, M. (2014). Middle school teachers' discipline-specific use of gestures and implications for disciplinary literacy instruction. *Journal of Literacy Research*, 46(2), 234-262. doi: 10.1177/1086296X14532615.
- Yuanyuan, T. (2014). The application of body language in English teaching *Journal of Language Teaching and Research*, 5(5), 1205-1209. doi: 10.4304/jltr.5.5.1205-120.
- Zeki, P.C., (2009). *a* North Cyprus: Eastern Mediterranean University. Faculty of Education, p. 2. doi:10.1016/j.sbspro.2009.01.254