

# Language Teaching Research Quarterly

2023, Vol. 35, 1–20



## Teachers' Classroom Interactional Competence: Scale Development and Validation

Zia Tajeddin<sup>1\*</sup>, Jaber Kamali<sup>2</sup>

<sup>1</sup>Tarbiat Modares University, Iran

<sup>2</sup>Ibn Haldun University, Turkey

*Received* 12 June 2023

*Accepted* 25 September 2023

### Abstract

Interactional competence has recently gained considerable attention in language education. As an aspect of this competence, classroom interactional competence has been in the limelight since Walsh's (2006) delineation of this concept. However, there is no survey tool to measure teachers' classroom interactional competence. To bridge this gap, the present study describes the development and validation of a teachers' classroom interactional competence (TCIC) scale. An outline of the relevant literature related to classroom interactional competence is provided, along with the process of scale development and validation. An exploratory factor analysis of the data from a large sample of language teachers ( $N = 564$ ) resulted in a 46-item scale that constituted nine factors, namely visual organizers, sociocultural interaction, questioning, interactional patterns, repair, language modification, turn taking, managerial interaction, and rhetorical script. The implications of the scale for the measurement and, in turn, the enhancement of teachers' classroom interactional competence are discussed.

**Keywords:** *Interactional Competence, Classroom Interactional Competence, Language Teachers, Scale Validation*

### Introduction

Interactional competence has been defined according to different frameworks and by different scholars. The first conceptualization of interactional competence was made by Kramsch (1986) as a response to describing language proficiency in the form of functional competence proposed by ACTFL (American Council on the Teaching of Foreign Languages). Kramsch argued that the ACTFL guidelines for speaking assessment were not successful in adequately addressing the interactional features of natural conversations and, accordingly, failed to capture the real nature of communicative competence. However, the notion of interactional competence was extensively articulated in the field of second language education no sooner than the 1990s. Hall (1993) provided a conceptual framework for L2 interactional competence to describe the role

\* Corresponding author.

E-mail address: tajeddinz@modares.ac.ir

<https://doi.org/10.32038/ltrq.2023.35.01>

that interaction plays in L2 spoken communication development. As a sociocultural theorist, Hall considered language a locally situated phenomenon. In such a phenomenon, the members of a community develop their relationships by engaging with one another, which helps them achieve their communicative goals. He and Young (1998) further upgraded interactional competence from the status of a construct to a theory.

The categorization of interactional competence – which is a core framework for this study – was proposed by Young (2008). He described three categories of resources that participants bring to interaction depending on the context, including identity, linguistic, and interactional. As to the classroom context, Walsh (2006) described classroom interactional competence as “teachers’ and learners’ ability to use interaction as a tool for mediating and assisting learning” (p. 132). The importance of interaction in the teaching and learning environment is the starting point of a successful classroom. Walsh (2014) argued that it is essential for teachers to develop their own interactional competence by placing interaction at the heart of learning to promote learning and learning opportunities. He asserted that teacher development might take advantage of an understanding of classroom interactional competence, which correlates positively with learning, “especially where learning is regarded as a social activity which is strongly influenced by involvement, engagement and participation; where learning is regarded as doing rather than having” (Walsh, 2014, p. 4). As classroom interactional competence can maximize learning opportunities in language classrooms, this study aimed at putting a spotlight on English as a foreign language (EFL) teachers' classroom interactional competence and developing a scale to measure it.

## **Literature Review**

Interactional competence has gained considerable attention from different scholars in recent years, among whom Walsh (2006) and Young (2011) stand out. According to Young, there are four fundamental aspects in defining interactional competence: “IC [interactional competence] as spoken interaction, IC as the pragmatics of interaction, IC as the collaboration of all interactional partners, and finally IC as investigation of social, institutional, political, and historical circumstances that extend beyond the horizon of a single interaction” (p. 427). In addition, Young (2008) described seven resources brought to interaction by participants in three different categories, namely “(a) identity resources, including participation framework; (b) linguistic resources, containing register and modes of meaning; and (c) interactional resources, including speech acts, turn-taking, repair, and boundaries” (pp. 429-430). Although there are seven resources for interactional competence, as Young explained, the resources can be different depending on the context. Interaction features can also be divided into three groups: nonverbal communication, interactive listening, and interactional management.

When interactional competence (henceforth IC) is brought into the zone of classrooms, it is called “Classroom Interactional Competence” (henceforth CIC) (Walsh, 2011, p. 158). The importance of interaction in the teaching and learning environment is the starting point. Walsh asserted that learning and learning opportunities can be improved by teachers’ and learners’ interactional decisions and ensuing actions. He also assumed that there would be more opportunities for learning by comprehending and expanding CIC.

Walsh (2011) delineated the features of CIC and proposed them as “(a) Extensive use of pausing throughout, some of these pauses are quite extensive, (b) A lack of repair, (c)

Signposting in instruction, (d) Extended learner turns, (e) Seeking clarification” (p. 169). Walsh went on to propose some other features for CIC as (f) Extended wait time use, (g) Requests for clarification, (h) Minimal response signals showing that the speakers’ understandings have been reached with no interruption in the interaction, and (i) Teacher content feedback by which he/she responds to the message, not the form. Kramsch (1986) construed interactional competence as a crucial factor in language learning to “give our students a truly emancipating, rather than compensating foreign language education” (p. 370). Kramsch did not argue for language proficiency; rather, she accentuated the need for an emphasis on communication and the features that strengthen the relationship between interlocutors. Thus, the components of CIC may range from knowledge of turn-taking to paralinguistic features such as posture and gesture.

Recently, the field of second language acquisition has observed a large body of research dealing with the development of IC by L2 speakers (e.g., Balaman, 2023; Dai, 2023; Dai & Davey, 2023; Hall, 1999; Pekarek Doehler & Pochon-Berger, 2011; Young, 1999) and its implications in different types of classrooms, namely face-to-face (e.g., Tai & Dai, 2023) and virtual or online (e.g., Li & Walsh, 2023; Moorhouse & Walsh, 2023). In these studies, IC or CIC has been investigated from two main perspectives. First, it has been mostly considered a social entity and an ongoing process that can be acquired without instruction or through implicit development (Nguyen, 2006, 2008; Tai & Dai, 2023; Yagi, 2007). Accordingly, the instruction of IC does not play any role in these studies as they are concerned with the length of residence not teaching IC. Second, IC has mostly been approached from the students’ points of view to explore the impact of instruction on the students’ development of IC (Cekaite, 2007; Ishida, 2009), overlooking teachers’ IC.

As the preceding review demonstrates, CIC can afford more learning opportunities in language classrooms. However, recognizing the lack of a standardized scale for CIC, this study sought to design a scale by which teachers’ CIC can be measured. In addition, previous studies were limited to only specific aspects of interaction features, including turn-taking (Gorjian & Habibi, 2015), questioning (Ko, 2014), repair (Ryan, 2015; Tavakoli, 2011), body language (Tai, 2014) third turn in IRE model (Girgin & Brandt, 2020) or even on its development in other languages such as Arabic (Al-Gahtani, 2022). Also, they relied heavily on descriptive statistics such as means and frequency (e.g., Csépes, 2009; Ducasse & Brown, 2009). Hence, there is still no clear picture of what teachers’ CIC could entail mainly due to the dearth of instruments to measure it. To address this gap, this study set out to justify, define, develop, and validate a teachers’ scale for classroom interactional competence in an EFL context. It aimed to fill the existing gap by first proposing a model of teachers’ classroom interactional competence and second developing and validating a scale to afford the quantification of the construct of teachers’ CIC. With the scale developed and validated in the current study, we, in effect, sought to investigate EFL teachers’ classroom interactional competence and to examine its validity and reliability. Therefore, the research question is proposed as:

**RQ:** What does language teachers’ classroom interactional competence scale consist of? Does the developed scale demonstrate an appropriate level of reliability and validity?

## Method

### *Participants*

The participants of this study were 564 teachers, with their teaching experience ranging from 6 months to 15 years. Among them, 240 were male and 324 were female and their ages ranged from 19 to 35 years. They were students or held BA, MA, or Ph.D. degrees. They were from different private language centers and public schools and were teaching various ELT textbooks. A total of 437 teachers filled out online questionnaires developed as Google Forms, which were sent out to them via email, Telegram, and WhatsApp, and 127 received print copies. Table 1 outlines the participants' demographic information. Snowball sampling was also employed by asking the teachers to send the scale Google Form link to their colleagues through social media.

The scale consisted of three parts. The first part detailed the main information about the survey. The participants' demographic information was collected in the second part. The third part, finally, included the items. In addition, a 6-point Likert scale was used with points ranging from strongly disagree to strongly agree. We, also, ensured the participants that their responses and information would be kept highly confidential.

**Table 1**

*The Participants' Demographic Information*

| Variable            | Category                    | Frequency | Percentage |
|---------------------|-----------------------------|-----------|------------|
| Gender              | Male                        | 240       | 42.5       |
|                     | Female                      | 324       | 57.5       |
| Age groups          | 19-25                       | 242       | 43         |
|                     | 26-35                       | 322       | 57         |
| Education           | student at Bachelor of Arts | 126       | 22         |
|                     | Bachelor of Arts            | 282       | 50         |
|                     | Master of Arts              | 134       | 24         |
|                     | PhD                         | 22        | 4          |
|                     |                             |           |            |
| Teaching experience | 6 months to 2 years         | 189       | 33         |
|                     | 2 to 5 years                | 182       | 32         |
|                     | 5 to 10 years               | 133       | 24         |
|                     | Above 10 years              | 60        | 11         |

### Scale Development

To develop the TCIC, this study adopted a quantitative method which was conducted in two phases as described below.

#### *Phase I*

This phase is twofold. First, to construct the Teachers' Classroom Interactional Competence Scale (henceforth TCIC), Dörnyei's (2003) instrument development stages were followed, based on which the first phase is reviewing the body of literature on interactional competence (e.g., Barraja-Rohan, 2011; Clifton, 2006; Cullen, 1998; Pekarek Doehler, 2021, Fives & Gills, 2015; Girgin & Brandt, 2020, Gorjian & Habibi, 2015; Ingram & Elliott, 2015; Markee, 2015; Seedhouse, 1996; Walsh, 2002, 2006, 2011; Young, 2008, 2011, 2013).

Second, the researchers held numerous sessions over a period of around four months to develop and review the pool of TCIC. Some modifications were applied in the initial scale after each session.

## *Phase II*

After the first phase, TCIC went through two types of scrutiny. First, it was scrutinized on its comprehensibility and relevance by two experts in the researchers' presence. While one of them was an expert in the field of applied linguistics, the other was an expert in statistics (specifically scale development). The problems pointed out by them – such as the vagueness of some items – were resolved. In the second scrutiny, seven teachers were requested to fill out TCIC while reading aloud to check their understanding of each item, and further modifications were made based on their comments. For instance, the word “foster” was not clear to all teachers; therefore, it was replaced with “facilitate,” which was proposed by them. There were initially 61 items, which were reduced to 59 due to the above-mentioned reasons. TCIC was on a 6-point Likert scale, including (1) “Strongly disagree,” (2) “disagree,” (3) “Partly disagree,” (4) “Partly agree,” (5) “agree,” and (6) “Strongly agree” to avoid indifferent responses and encourage participants to make a choice that leans either positively or negatively.

## **Scale Validation**

To validate the scale, it was, first, piloted and administered to 53 teachers to run descriptive analysis and reliability calculation on the gathered data. The Cronbach alpha reliability calculated was .88 and the kurtosis for all the items was between -2 and +2, which shows their acceptability. The gathered data revealed that some changes and modifications were needed in items 4, 15, 51, 56, and 61. In item 4, an adjustment was made by changing “give enough chance to” to “encourage.” In item 15, the word “fair” was eliminated as it was supposed to be rather vague. As to item 51, the word “initiate” was changed to “begin” because it was found that this might be a source of confusion. Item 56 was considered a very confusing item as the reference to the word “their” was not clear; therefore, the wording and word order of “teachers should ask learners questions to check their understanding” was changed to “teachers should ask questions to check learners' understanding.”

The modified scale was then administered to a total of 564 male and female teachers teaching at different language institutes. Methods used for instrument distribution were both face-to-face and online with the help of Google Forms. The result of this administration is delineated in the next part.

## **Results**

### *Scale Features*

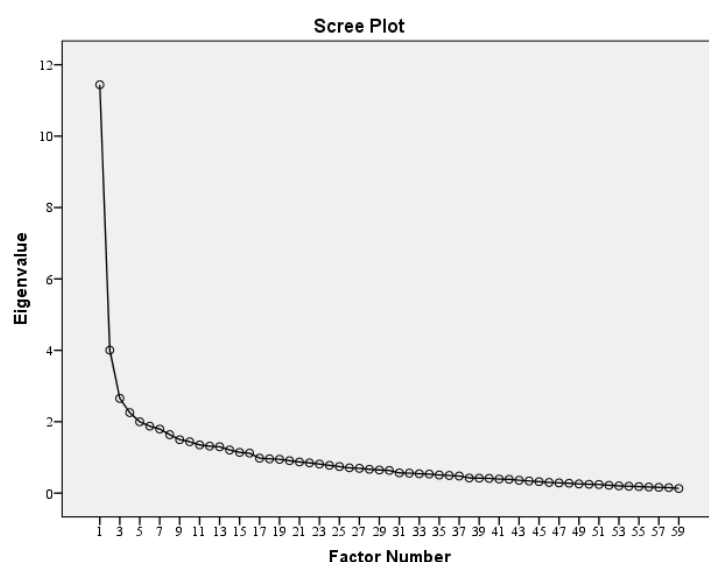
The 59 items in the teachers' classroom interactional competence (TCIC) scale, which was a 6-point Likert scale, were subjected to a principal axis factoring (PAF) with direct Oblimin rotation. This method of extraction, PAF, is advantageous in exploratory factor analysis because it results in a factor analytic model in which common variance is examined and unique and error variance are removed (Tabachnick & Fidell, 2013). It can maximize the extracted variance, repressing the maximum amount of data in the scale. Moreover, the study used the Oblimin rotation method because psychological constructs in the Humanities are correlated with each other and this study, which was focused on interactional competence, is not an exception. As the aim of this paper was not the evaluation of a hypothesized structure, but to explore the underlying constructs of teachers' classroom interactional competence (Kelley & Maxwell, 2010), confirmatory factor analysis (CFA) was not employed.

Before performing PAF, the researchers investigated the appropriateness of data for factor analysis. In the first part, the normality was tested by considering the items' skewness and kurtosis measures, which were found to be between -2 and +2. Hence, based on Tabachnick and Fidell (2013), the assumption of normality was met for the data. Second, the matrix of correlations showed an optimum amount of correlation among the items. Third, the use of the Kaiser-Meyer-Olkin measure helped estimate the sampling adequacy for the analysis. As seen in Table 2, KMO was 0.81, which exceeded the recommended value of 0.6 (Field, 2009; Kaiser, 1974). It is also the case for all KMO values for individual items which were all above the accepted level of 0.5 (Field, 2009). Fourth, as shown in Table 2, Bartlett's test of sphericity,  $X^2(1711) = 14826.12$ ,  $p = .00$ , indicated that item correlations were sufficiently large for PAF.

**Table 2***KMO and Bartlett's Test*

|  |                    |          |
|--|--------------------|----------|
| Kaiser-Meyer-Olkin Measure of Sampling Adequacy. |                    | 0.81     |
| Bartlett's Test of Sphericity                    | Approx. Chi-Square | 14826.12 |
|  | df                 | 1711.00  |
|  | Sig.               | 0.00     |

After running PAF, a 16-factor solution emerged. This solution was achieved by considering the Kaiser Criterion and inspecting the scree plot (Figure 1).

**Figure 1***Scree Plot of Components and Eigenvalues*

Some factors included one or two items (Table 3). According to Meyers et al. (2013) and Kline (2016), at least three items are needed for a factor, so all the factors embodying one or two items were omitted from the analysis as they were insufficiently represented by the items. Consideration of this point resulted in a 9-factor solution with 46 items which, as illustrated in Table 3, explained a total of 42% of common variance, with nine components contributing

18.62%, 5.96%, 3.77%, 3.05%, 2.56%, 2.38 %, 2.26 %, 1.99%, and 1.75%, respectively. It is worthy of note that items 32 and 54 were suppressed by SPSS from the factor solution due to their low coefficients.

**Table 3**

*Total Variance Explained by the 9-Factor-Solution*

| Factor | Initial Eigenvalues |               |              | Extraction Sums of Squared Loadings |               |              | Rotation Sums of Squared Loadings |
|--------|---------------------|---------------|--------------|-------------------------------------|---------------|--------------|-----------------------------------|
|        | Total               | % of Variance | Cumulative % | Total                               | % of Variance | Cumulative % | Total                             |
| 1      | 11.44               | 19.39         | 19.39        | 10.98                               | 18.62         | 18.62        | 6.84                              |
| 2      | 4.01                | 6.79          | 26.18        | 3.52                                | 5.96          | 24.57        | 6.87                              |
| 3      | 2.65                | 4.50          | 30.68        | 2.23                                | 3.77          | 28.35        | 2.80                              |
| 4      | 2.25                | 3.82          | 34.50        | 1.80                                | 3.05          | 31.39        | 4.83                              |
| 5      | 2.00                | 3.39          | 37.89        | 1.51                                | 2.56          | 33.95        | 3.65                              |
| 6      | 1.87                | 3.18          | 41.06        | 1.41                                | 2.38          | 36.34        | 3.26                              |
| 7      | 1.79                | 3.04          | 44.11        | 1.33                                | 2.26          | 38.60        | 4.23                              |
| 8      | 1.64                | 2.77          | 46.88        | 1.17                                | 1.99          | 40.59        | 4.55                              |
| 9      | 1.50                | 2.54          | 49.42        | 1.03                                | 1.75          | 42.33        | 5.71                              |

The items clustering on the same components in the structure matrix suggested the following results (see Table 4): Factor one (9 items), Factor two (7 items), Factor three (5 items), Factor four (6 items), Factor five (3 items), Factor six (4 items), Factor seven (3 items), Factor eight (5 items), and Factor nine (4 items). Items 1, 22, 23, 28, 30, 31, 32, 34, 43, 47, 50, 54, and 55, which were not clustered around any construct, were deleted.

**Table 4**

*Structure Matrix*

|        | Factor      |             |   |   |   |   |   |   |   |
|--------|-------------|-------------|---|---|---|---|---|---|---|
|        | 1           | 2           | 3 | 4 | 5 | 6 | 7 | 8 | 9 |
| item21 | <b>0.80</b> |             |   |   |   |   |   |   |   |
| item17 | <b>0.72</b> |             |   |   |   |   |   |   |   |
| item18 | <b>0.71</b> |             |   |   |   |   |   |   |   |
| item16 | <b>0.66</b> |             |   |   |   |   |   |   |   |
| item19 | <b>0.66</b> |             |   |   |   |   |   |   |   |
| item20 | <b>0.66</b> |             |   |   |   |   |   |   |   |
| item14 | <b>0.57</b> |             |   |   |   |   |   |   |   |
| item15 | <b>0.52</b> |             |   |   |   |   |   |   |   |
| item13 | <b>0.48</b> |             |   |   |   |   |   |   |   |
| item43 |             | <b>0.75</b> |   |   |   |   |   |   |   |
| item45 |             | <b>0.67</b> |   |   |   |   |   |   |   |
| item46 |             | <b>0.65</b> |   |   |   |   |   |   |   |
| item44 |             | <b>0.58</b> |   |   |   |   |   |   |   |
| item31 |             | <b>0.58</b> |   |   |   |   |   |   |   |
| item8  |             | <b>0.52</b> |   |   |   |   |   |   |   |

|        |      |      |      |      |      |      |      |  |  |
|--------|------|------|------|------|------|------|------|--|--|
| item24 | 0.48 |      |      |      |      |      |      |  |  |
| item37 | 0.74 |      |      |      |      |      |      |  |  |
| item38 | 0.65 |      |      |      |      |      |      |  |  |
| item49 | 0.51 |      |      |      |      |      |      |  |  |
| item57 | 0.49 |      |      |      |      |      |      |  |  |
| item53 | 0.48 |      |      |      |      |      |      |  |  |
| item2  |      | 0.61 |      |      |      |      |      |  |  |
| item6  |      | 0.59 |      |      |      |      |      |  |  |
| item7  |      | 0.59 |      |      |      |      |      |  |  |
| item12 |      | 0.52 |      |      |      |      |      |  |  |
| item4  |      | 0.49 |      |      |      |      |      |  |  |
| item5  |      | 0.47 |      |      |      |      |      |  |  |
| item35 |      |      | 0.62 |      |      |      |      |  |  |
| item36 |      |      | 0.61 |      |      |      |      |  |  |
| item33 |      |      | 0.54 |      |      |      |      |  |  |
| item25 |      |      |      | 0.63 |      |      |      |  |  |
| item26 |      |      |      | 0.58 |      |      |      |  |  |
| item52 |      |      |      | 0.53 |      |      |      |  |  |
| item51 |      |      |      | 0.49 |      |      |      |  |  |
| item10 |      |      |      |      | 0.75 |      |      |  |  |
| item9  |      |      |      |      | 0.64 |      |      |  |  |
| item11 |      |      |      |      | 0.56 |      |      |  |  |
| item58 |      |      |      |      |      | 0.63 |      |  |  |
| item48 |      |      |      |      |      | 0.61 |      |  |  |
| item56 |      |      |      |      |      | 0.59 |      |  |  |
| item3  |      |      |      |      |      | 0.56 |      |  |  |
| item27 |      |      |      |      |      | 0.52 |      |  |  |
| item41 |      |      |      |      |      |      | 0.68 |  |  |
| item42 |      |      |      |      |      |      | 0.63 |  |  |
| item40 |      |      |      |      |      |      | 0.57 |  |  |
| item39 |      |      |      |      |      |      | 0.48 |  |  |

### *Teachers' CIC*

The results of EFA represented five factors that emerged from the 46 items: (a) visual organizers, (b) sociocultural interaction, (c) questioning, (d) interactional patterns, (e) repair, (f) language modification, (g) turn taking, (h) managerial interaction, and (i) rhetorical script.

**Table 5**

*The Nine Factors of TCIC in the Final TCIC Scale*

| Factors  | Item numbers              |
|----------|---------------------------|
| Factor 1 | Visual organizers         |
| Factor 2 | Sociocultural interaction |
| Factor 3 | Questioning               |
| Factor 4 | Interactional patterns    |
| Factor 5 | Repair                    |
| Factor 6 | Language modification     |
| Factor 7 | Turn taking               |
| Factor 8 | Managerial interaction    |
| Factor 9 | Rhetorical script         |



*Visual Organizers*

The structure matrix (Table 4) showed that items 13, 14, 15, 16, 17, 18, 19, 20, and 21 were loaded on factor one, which measured teachers' knowledge of using materials and aids, mostly visual. Table 6 presents which items comprise this construct. As the table illustrates, the means of individual items were between 4.47 and 5.61. That is, the participants were almost aware of visual organizers. The highest means of this construct belong to items 17, 16, and 15 with 5.10, 5.36, and 5.61 mean values, respectively.

**Table 6***Items Corresponding to Visual Organizers Factor*

| Item | Statement  | Mean | SD   |
|------|--|------|------|
| 13   | Teachers should let learners have more turns to speak.   | 4.47 | 1.08 |
| 14   | Teachers should use body language to show their emotion.   | 5.05 | 1.07 |
| 15   | Teachers should have eye contact with all learners.  | 5.61 | 0.80 |
| 16   | Teachers should use paralinguistic features (e.g., loudness and intonation) to foster interaction. | 5.36 | 0.90 |
| 17   | Teachers should use their facial expressions to manage the events in classrooms.                   | 5.10 | 0.90 |
| 18   | Teachers should use their body language to assist communication between learners.                  | 4.95 | 0.96 |
| 19   | Teachers should use appropriate body language to transmit a teaching point.                        | 5.07 | 0.95 |
| 20   | Teachers should use different types of body language to give learners different feelings.          | 4.85 | 1.07 |
| 21   | Teachers should use body language to attract learners' attention to the lesson.                    | 4.98 | 1.04 |

*Sociocultural Interaction*

Factor two (with the loading items 8, 24, 31, 43, 44, 45, and 46) represents sociocultural interaction (see Table 7 for the corresponding items). As can be seen in the table, the participants showed almost high awareness about sociocultural interaction with item means between 4.50 and 4.87. The findings showed that the highest mean values belong to items 46 ( $M = 4.82$ ), 24 ( $M = 4.85$ ), and 45 ( $M = 4.87$ ). The other items had almost similarly high mean values.

**Table 7***Items Corresponding to Sociocultural Interaction Factors*

| Item | Statement  | Mean | SD   |
|------|--|------|------|
| 8    | Teachers should use some cues to motivate learners to have longer turns.   | 4.55 | 1.02 |
| 24   | The teacher talk time should be adjusted to the purpose of the activity.   | 4.85 | 1.04 |
| 31   | Teachers should encourage learners to adequately elaborate on what they said.  | 4.50 | 0.97 |
| 43   | Teachers should clarify social/cultural meanings through interaction with learners.  | 4.79 | 0.93 |
| 44   | Intonations should help teachers clarify their social/cultural meanings.   | 4.60 | 0.94 |
| 45   | Teachers should pay attention to the learners' social/cultural background since it has an impact on learners' understanding of teacher talk. | 4.87 | 1.07 |
| 46   | Teachers should arrange the seats in a class in a way that fosters interaction.  | 4.82 | 1.13 |

*Questioning*

Factor three (with the loading items 37, 38, 49, 53, and 57) included teacher questioning items displayed in Table 8. As can be seen in the table, the highest and lowest mean values with means of 3.53 and 3.10, respectively, belong to items 38 and 49. The average mean for items in this factor is almost 3, implying the average awareness of teachers about teacher questioning.

**Table 8***Items Corresponding to Questioning Factors*

| Item | Statement  | Mean | SD   |
|------|--|------|------|
| 37   | Teachers should correct all learners' errors.  | 3.11 | 1.52 |
| 38   | Teachers should provide correct forms on the spot when an error happens.                       | 3.53 | 1.35 |
| 49   | Teachers should help learners interact with individual learners more than a group of learners. | 3.10 | 1.13 |
| 53   | Teachers should ask learners only questions which they themselves know the answer to.          | 3.24 | 1.15 |
| 57   | Teachers should ask learners questions which have only one correct response.                   | 3.35 | 1.21 |

*Interactional Patterns*

Items 2, 4, 5, 6, 7, and 12, which were loaded on factor four, measured teachers' awareness of interaction patterns. Look at Table 9 to see the items forming this construct. As shown in the table, the individual items have means ranging from 4.51 to 5.60, which shows relatively high awareness on the side of teacher participants regarding this factor. The highest mean belongs to item 4 with 5.60, and the lowest to item 12 with a 4.51 mean value.

**Table 9***Items Corresponding to Interactional Patterns Factors*

| Item | Statement   | Mean | SD   |
|------|---|------|------|
| 2    | Teachers should give enough time to learners to plan what they want to say.             | 4.74 | 1.02 |
| 4    | Teachers should encourage learners to participate in classroom interaction.             | 5.60 | 0.80 |
| 5    | Teachers should involve silent learners by asking them questions.                       | 4.84 | 1.21 |
| 6    | Teachers should address a question to the whole class rather than a particular learner. | 4.78 | 1.10 |
| 7    | Teachers should motivate learners to speak more when it is their turn.                  | 4.87 | 1.11 |
| 12   | Teachers should allow sufficient wait time for the learners to finish their turn.       | 4.51 | 0.92 |

*Repair*

Table 10 suggests that three items (33, 35, and 36) related to repair (factor five) own mean values around 5, which reflects teachers' high awareness of this factor in CIC. They have almost the same mean value with 5.05, 4.93, and 4.95 for items 33, 35, and 36, respectively.

**Table 10***Items Corresponding to Repair Factors*

| Item | Statement  | Mean | SD   |
|------|--|------|------|
| 33   | Teachers should provide feedback on learners' performance. | 5.05 | 1.05 |
| 35   | Teachers should help learners notice their own errors.     | 4.93 | 0.97 |
| 36   | Teachers should help learners correct their own errors.    | 4.95 | 1.04 |

*Language Modification*

Factor six on which items 25, 26, 51, and 52 were loaded measured the degree of teachers' awareness of language modification. Table 11 presents the items comprising this construct. As seen in the table, the means of individual items are between the highest of 4.34 and the lowest of 3.99 which shows average awareness on the side of teacher participants regarding language modification.

**Table 11***Items Corresponding to Language Modification Factors*

| Item | Statement   | Mean | SD   |
|------|---|------|------|
| 25   | Teachers should repeat their own utterance in order to enhance learning for the benefit of the class.           | 4.31 | 1.10 |
| 26   | Teachers should repeat one learner's utterance in order to enhance learning for the benefit of the whole class. | 4.00 | 1.11 |
| 51   | Teachers should begin classroom interaction.  | 4.34 | 0.96 |
| 52   | Teachers should end classroom interaction.  | 3.99 | 1.15 |

*Turn Taking*

Factor seven (with the loading items 9, 10, and 11) refers to turn taking strategies and teachers' awareness of them (Table 12). As the table shows, the means of items 9 and 10 are the same ( $M = 4.48$ ) while item 11 has a mean value of 3.71.

**Table 12***Items Corresponding to Turn Taking Factors*

| Item | Statement  | Mean | SD   |
|------|--|------|------|
| 9    | Teachers should control how long a learner should speak.                 | 4.48 | 1.15 |
| 10   | Teachers should control the overlaps in classroom interactions.          | 4.48 | 0.99 |
| 11   | Teachers should decide who will take the turn in classroom interactions. | 3.71 | 1.17 |

*Managerial Interaction*

The data presented in Table 13 suggests that 5 items related to managerial interaction (factor eight) (i.e., 3, 27, 48, 56, and 58) had mean values around 5, reflecting teachers' high awareness of the issue in CIC. The item with the highest mean value is item 56 with 5.21 and the lowest mean value belongs to item 58 with 4.80.

**Table 13***Items Corresponding to Managerial Interaction Factors*

| Item | Statement  | Mean | SD   |
|------|--|------|------|
| 3    | Teachers should allow learners to talk about the topic related to their personal experience. | 4.90 | 1.04 |
| 27   | Teachers should provide a sample for the activities learners are going to perform.           | 4.99 | 0.97 |
| 48   | Teachers should help learners interact with each other.                                      | 5.08 | 0.96 |
| 56   | Teachers should ask questions to check learners' understanding.                              | 5.21 | 0.91 |
| 58   | Teachers should ask learners questions about their opinion on various topics.                | 4.80 | 0.95 |

*Rhetorical Script*

Factor nine (with the loading items 39, 40, 41, and 42) measured teachers' awareness of rhetorical script (see Table 14 for the items forming this construct). As displayed in the table, the means of individual items were between 4.77 and 5.14, showing relatively high awareness on the side of teachers regarding this factor. The highest mean belongs to item 39 with 5.14, and the lowest to item 42 with a 4.77 mean value.

**Table 14***Items Corresponding to Rhetorical Script Factors*

| Item | Statement   | Mean | SD   |
|------|---|------|------|
| 39   | Teachers should know how to properly use speech acts such as requests, thanking, and apologies.   | 5.14 | 0.90 |
| 40   | Teachers should help learners learn formulaic expressions such as “How do you do,” “Welcome back,” and “Never mind” for more effective communication. | 4.84 | 0.96 |
| 41   | Teachers should teach speech acts such as requests, thanking, and apologies to help learners use them.  | 4.96 | 1.00 |
| 42   | Teachers should help learners understand differences between various speech acts.   | 4.77 | 0.95 |

**Discussion**

This study sought to report on the construction and validation of a scale by which EFL teachers' CIC can be measured. The factors that emerged from this study were nine consisting of (a) visual organizers, (b) sociocultural interaction, (c) questioning, (d) interactional patterns, (e) repair, (f) language modification, (g) turn taking, (h) managerial interaction, and (i) rhetorical script (see Table 15).

**Table 15***Teachers' Classroom Interactional Competence Constructs and Their Major Components*

| Factors                   | Components  |
|---------------------------|---|
| Visual organizers         | a. Body language<br>b. Eye-contact  |
| Sociocultural interaction | a. Sociocultural meaning<br>b. Sociocultural background   |
| Questioning               | a. Referential questions<br>b. Display questions  |
| Interactional patterns    | a. Student-student interaction<br>b. Teacher-student interaction<br>c. Teacher-classroom interaction  |
| Repair                    | a. Which<br>b. When<br>c. Who   |
| Language modification     | a. Purpose of modification<br>b. Echoing<br>c. modeling<br>d. Teacher talk<br>e. Grammar modification |
| Turn taking               | a. Turn extension<br>b. Turn control<br>c. Turn management  |
| Managerial interaction    | a. Topic management<br>b. wait time<br>c. class participation   |
| Rhetorical script         | a. Using speech acts<br>b. Teaching speech acts   |

The first factor, visual organizers, comprises two major components:

- (a) *Body language*, which includes different forms of gesture, posture, and facial expressions used to make the learning happen
- (b) *Eye contact*, which deals with having fair eye contact.

The nine items in this factor of the scale include “using facial expressions to manage the events in classrooms”, “using body language to show emotion”, “having eye-contact with all learners”, “using paralinguistic features (e.g., loudness and intonation) to foster interaction”, “using body language to assist communication between learners”, “using appropriate body language to transmit a teaching point”, “using different types of body language to give learners different feelings”, “using body language to attract learners’ attention to the lesson”, and “teacher talking time should be adjusted to the purpose of the activity”, among which the impact of body language is traceable. These items are fully adaptable to Negueruela-Azarola et al.’s (2015) study in which bodily contributions contain eye gazing, gesture, and body positioning. Non-verbal communication has a very influential effect on human interaction and can be classified into two different categories, namely speech-independent and speech-related (Knapp & Hall, 2007). Speech-independent gestures have their own culturally accepted interpretation, so they have a direct verbal translation. On the other hand, speech-related gestures are employed in parallel with the verbal speech which is exploited to accentuate the message which is being communicated. The gestures that emerged from this study were mostly from the second group since in language classrooms, language is used as a medium of instruction and inquiry. The interesting item loaded on this factor is the balanced Teacher Talking Time (TTT) (Walsh, 2011). To achieve a balanced TTT, unnecessary teacher talk should be eliminated, and using gestures is a way to do so.

The second factor, sociocultural interaction, represents strategies to take learners’ social and cultural backgrounds into account (Freire, 2004). It includes:

- (a) *Sociocultural meaning*, which means making learners understand sociocultural norms of interaction
- (b) *Sociocultural background*, which means taking sociocultural norms into account

In this scale, this factor encompasses seven items including “helping teachers clarify their social/cultural meanings through intonation”, “arranging the seats in a class in a way that fosters interaction”, “helping teachers clarify their social/cultural meanings”, “paying attention to the learners’ social/cultural background since it has an impact on learners’ understanding of teacher talk”, “using some cues to motivate learners to have longer turns”, “adjusting teacher talking time (TTT) to the purpose of the activity”, and “encouraging learners to adequately elaborate on what they said.” It should be noted that the items of TTT and encouragement may be loaded on this factor because they show the agency of the teacher. As Canagarajah (1999) argued, teachers and students negotiate power in the class and TTT is a way of practicing it with the teacher. Furthermore, one might be doubtful how the item dealing with seating arrangement is connected to this factor. However, As far as the social-cultural background of the students can cause the same background knowledge which can act as schemata, having the students from the same socio-cultural background sit next to one another for discussions can promote interaction among them. (Luk & Lin, 2007).

The third factor, questioning, lies at the heart of teaching (Fisher, 2005) and represents different strategies for asking questions that teachers employ to elicit different ranges of responses from learners. Two components comprising this factor are:

- (a) *Referential questions*, which refer to the techniques teachers use to ask questions whose answers they do not know,

- (b) *Display questions*, which deal with techniques teachers use to ask questions whose answers they know.

Questions and answers seem necessary if we consider dialogs as a means of mutual space through which learners construct and reconstruct knowledge. Questions are used to assess students' knowledge and to help them reflect, grow, and broaden their thinking (Gruegon & Hubbard, 2006). Although all types of questions can help learning happen in language classrooms, the ones that emerged in this study included five items such as “correcting all learners’ errors.”, “helping learners interact with each other”, “asking learners only questions which teachers themselves know the answer to”, “asking learners questions which have only one correct response”, and “helping learners interact with individual learners more than a group of learners.”

The fourth factor, interactional patterns, embodies strategies teachers employ to encourage learners to speak more and have longer turns. As the findings show, it consists of three major components:

- (a) *Student-student interaction*, which aids the teacher in fostering interaction among learners
- (b) *Teacher-student interaction*, which shows how the teacher interacts with individual students
- (c) *Teacher-classroom interaction*, which represents the way the teacher interacts with the whole class

This factor includes six items in TCIC, such as “allowing learners to talk about the topic related to their personal experience”, “motivating learners to speak more when it is their turn”, “giving enough time to learners to plan what they want to say”, “encouraging learners to participate in classroom interaction”, “involving silent learners by asking them questions”, and “addressing a question to the whole class rather than a particular learner”. Peer interaction has always been praised in the architecture of the language classroom (Seedhouse, 1996). Some studies have examined peer interaction from different perspectives. One of the recent ones is Zabihi and Ghahramanzadeh (2022), who explored the impact of the proficiency of the pair members on the level of engagement. The result of their study is fully online with the components of this construct on the ground that the level of proficiency can affect the level of engagement where high-high and low-low pairs can experience higher cognitive and social engagement than high-low ones.

The fifth factor, i.e. repair, represents strategies that teachers employ to revise and correct learners’ erroneous utterances or to provide feedback on what they say. The three major items under this factor include:

- (a) “*Which*”, meaning which error should be corrected
- (b) “*When*”, meaning when errors should be corrected
- (c) “*Who*”, meaning who should correct the errors

Repair is one of the most-cited features of interactional competence (e.g., Hellermann, 2011; Kasper, 2006; Pekarek Doehler, 2018) and is part of corrective feedback. Lyster (2015) argued that classroom studies confirm the effectiveness of classroom corrective feedback when compared with no corrective feedback. It is noteworthy that almost all salient features of feedback and repair reported in the literature were generated into items in this study (e.g., Ellis, 2010, Li, 2010; Lyster & Ranta, 1997); however, the ones that emerged after running the factor analysis were only three of these strategies, namely “providing feedback on learners’

performance”, “helping learners noticing”, and “correcting their own errors.” They are the strategies that teachers use to revise and correct learners’ erroneous utterances or to provide feedback on what they say. This indicates that the teachers who participated in this study might have been unfamiliar with repair, which emphasizes the need for more teacher education or professional development programs dedicated to it.

Language modification is the sixth factor, consisting of five major components as follows:

- (a) Purpose of modification, which includes factors such as level of learners, goals of the class, the purpose of the activity, and the like
- (b) *Echoing*, which means the teacher repeating himself/herself or the learners
- (c) *Modeling*, which includes the provision of a model for the activity
- (d) *Teacher talk*, which consists of the quality of teacher talk and its quantity
- (e) *Grammar modification*, which refers to simplifying grammar used by teachers based on learners’ level

Language modification represents the teacher’s change in his or her speech to make the language easier to understand. This factor includes five components in the present scale, namely “providing feedback on learners’ performance”, “repeating own utterance in order to enhance learning for the benefit of the class”, “repeating one learner’s utterance in order to enhance learning for the benefit of the whole class”, “modifying choice of grammar to the learners’ proficiency level”, and “beginning classroom interaction, and ending it”. Considering the definition of teacher talk by Richards and Schmidt (2010), teachers try to communicate with learners in simplified speech. This simplification is observed in motherese talk, too. However, the simplification, or modification, in teacher talk is different from that of motherese as the age of learners in motherese is under five, whereas instructed SLA in which teacher talk occurs generally starts after the age of five. This modification is mostly referred to as level adaptation in methodology, which is an indicator of an effective session (Harmer, 2001, 2012; Scrivener, 2011). Repeating yourself or what a learner says are the qualities of language modification. These repetitions, albeit produced mixed results in the literature (Cullen, 1998; Szulc-Kurpaska, 2019; Urhahne et al., 2020), are observable in real-life interactions.

Turn taking is the seventh factor, comprising three components:

- (a) *Turn extension*, which means letting the learner speak at length
- (b) *Turn control*, which means putting an end to the learners’ utterances.
- (c) *Turn management*, which means controlling who should talk and how much.

It includes three strategies such as “controlling how long a learner should speak”, “controlling overlaps in classroom interactions”, and “deciding who will take the turn in classroom interactions”. This factor resonates with Hellermann’s (2008) argument that features like allocating turns improve with advancing in language proficiency and that a teacher who is supposed to be proficient in English teaching – in terms of content knowledge and English knowledge – should be a competent user of this strategy; therefore, this strategy is an indicator of successful teaching. Similarly, Pekarek Doehler, (2019) posits that interactions between teachers and students in the second language class serve as the main point for learning how to use the language and that they need to know how to take, leave, and grab the turn for successful interactions.

The eighth factor, managerial interaction, is a composite of three major components:

- (a) *Topic management*, means what, how, and how much should we talk about a topic and who should talk about it
- (b) *Wait time*, means the interval between the time that a teacher asks a question and the time a learner provides an answer for it.
- (c) *Class participation*, means how active a learner is in the classroom.

It includes strategies such as “allowing learners to talk about the topic related to their personal experience”, “providing a sample for the activities learners are going to perform”, “helping learners interact with each other”, “asking questions to check learners’ understanding”, and “asking learners questions about their opinion on various topics.” These strategies represent the managerial interactions mostly related to topic management and managing the turn. Skukauskaite et al. (2015) categorized interaction into five domains. The main domain consists of six categories, one of which is instruction. In this strategy, the teacher focuses on pedagogical aims such as talking about the topic related to their personal experience. Moreover, in the definition of scaffolding, Wood et al. (1976) asserted that one of the components of scaffolding is demonstrating an idealized version of the act to be performed, which is in line with the items seen in this category.

Finally, the ninth factor, rhetorical script, represents strategies to use and teach speech acts in the classroom. It consists of two components, namely:

- (a) *Using speech acts*, which means the ability to use various speech acts properly
- (b) *Teaching speech acts*, which is the ability to teach various speech acts properly

Pragmatics has gained considerable attention from SLA scholars and is becoming one of the important components of language ability without which knowledge of the language is not sufficient for appropriate communication (Briner, 2012). This fairly new issue used as a factor in our scale includes four items measuring “knowing how to use speech acts properly”, “helping learners learn formulaic expressions for more effective communication”, “teaching speech acts to help learners use them”, and “helping learners understand differences between various speech acts” (Barraja-Rohan, 2011). This is simply neglected in teaching. Over four decades ago, Rintell (1979) asserted that “pragmatics is the study of speech acts” (p. 98), where L2 speakers’ pragmatic skill is evaluated by their ability to produce utterances to communicate “specific intentions” (p. 98) and, equally, their interpretation of these utterances’ intentions. Not knowing these intended meanings or illocutions, in Austin’s (1975) words, interlocutors’ misunderstanding is inevitable.

To sum up, the nine factors constituting the construct of teachers’ CIC described in this study contribute to our understanding of teachers’ classroom interactional competence in two important ways. First, the current scale affords an evaluation of the multi-factorial construct of teachers’ classroom interactional competence. Second, this scale creates a sense of self-development for teachers who can test and develop their level of classroom interactional competence with the use of the newly designed scale.

## Conclusion

The lack of an instrument to measure teachers’ classroom interactional competence prompted the current study. To this end, the current study reported the development and validation of a scale to assess L2 teachers’ classroom interactional competence (CIC). In effect, this study is the essential derive of teacher professional development and is a salient part of teacher




educators' repertoire to make them able to translate this scale or modify it in teachers' everyday teaching and learning practices in their classroom milieu which, in turn, leads to the achievement of the students.

The results obtained from the data can offer implications for teachers, teacher educators, and researchers. First, TCIC can be used by teachers as a self-assessment tool for the measurement of the current level of CIC. Second, teacher educators can use TCIC as a diagnostic or consciousness-raising tool. By the same token, as teachers can use TCIC for self-assessment purposes, teacher educators can employ the scale to determine and assess the teachers' CIC. Teachers rarely receive education when it comes to teaching them how to interact because it is all too frequently thought that they already know how to do so. TCIC can be used profitably in different teacher education programs to raise pre-service and in-service teachers' awareness of the nature of CIC which can shape their actions. Finally, researchers can employ the TCIC as a research tool to assess it in teachers. As it is true with all self-report instruments, supervisors and teacher educators should consider TCIC as a source of information by which they can gauge the current level of teachers' CIC. By being aware of their level of CIC, teachers can learn how to become more competent interactors through which they will become more effective teachers.

Regarding the limitations of this study, it is needless to say that the present scale lacks some aspects of CIC which were deleted because they did not cluster around any construct. These aspects are associated with selecting topics in managerial interaction, level adaptation in language modification, error correction and focus-on-form in repair, social clarification in sociocultural interaction, individual and peer interaction in interactional patterns, rhetorical questions, and clarification requests in questioning. It can be the result of the context where this study was conducted, i.e., Iran. The data for this study were elicited from several non-native English language teachers. Future research can focus on native English-speaking teachers. Further studies can also provide evidence of CIC of teachers of other languages. Finally, because this study aimed to find the factorial structure of a scale for the teachers' CIC, other studies can investigate this competence in learners.

## ORCID

 <https://orcid.org/0000-0002-0430-6408>

 <https://orcid.org/0000-0003-4018-7597>

## Acknowledgements

We are most grateful to Hassan Mohebbi and Esma Yildiz for their help during review and production procedures.

## Funding

This research received no specific grant from any funding agency in the public, commercial, or not-for-profit sectors.

## Ethics Declarations

## Competing Interests

No, there are no conflicting interests.

## Rights and Permissions

## Open Access

This article is licensed under a, which grants permission to use, share, adapt, distribute and reproduce in any medium or format provided that proper credit is given to the original author(s) and the source, provide a link to the Creative Commons licence, and indicate if any changes were made.

## References

- Al-Gahtani, S. (2022). The development of L2 interactional competence in Arabic: The case of multiple requests. *Foreign Language Annals*, 55(2), 610-634. <https://doi.org/10.1111/flan.12603>
- Austin, J. L. (1975). *How to do things with words*. Oxford University Press.
- Balaman, U. (2023). Opportunities for pre-service teacher learning in video-mediated peer interactions: Focus on classroom interactional competence. In K. Sadeghi & M. Thomas (Eds.), *Second language teacher professional development: Technological innovations for post-emergency teacher education* (pp. 269-287). Palgrave Macmillan.
- Barraja-Rohan, A. M. (2011). Using conversation analysis in the second language classroom to teach interactional competence. *Language Teaching Research*, 15(4), 479-507. <https://doi.org/10.1177%2F1362168811412878>
- Briner, B. (2012). *Introduction to pragmatics*. Wiley Blackwell.
- Canagarajah, A. S. (1999). *Resisting linguistic imperialism in English teaching*. Oxford University Press.
- Cekaite, A. (2007). A child's development of interactional competence in a Swedish L2 classroom. *The Modern Language Journal*, 91(1), 45-62. <https://doi.org/10.1111/j.1540-4781.2007.00509.x>
- Clifton, J. (2006). A conversation analytical approach to business communication: The case of leadership. *Journal of Business Communication*, 43(3), 202-219. <https://doi.org/10.1177/0021943606288190>
- Csépes, I. (2009). *Measuring oral proficiency through paired-task performance*. Peter Lang.
- Cullen, R. (1998). Teacher talk and the classroom context. *ELT Journal*, 52(3), 179-187. <https://doi.org/10.1093/elt/52.3.179>
- Dai, D. W. (2023). What do second language speakers really need for real-world interaction? A needs analysis of L2 Chinese interactional competence. *Language Teaching Research*. <https://doi.org/10.1177/13621688221144836>
- Dai, D. W., & Davey, M. (2023). On the promise of using membership categorization analysis to investigate interactional competence. *Applied Linguistics*. <https://doi.org/10.1093/applin/amad049>
- Dörnyei, Z. (2003). *Questionnaires in second language research: Construction, administration, and processing*. Lawrence Erlbaum.
- Ducasse, A. M., & Brown, A. (2009). Assessing paired orals: Rater's orientation to interaction. *Language Testing*, 26(3), 423-443. <https://doi.org/10.1177%2F0265532209104669>
- Ellis, R. (2010). Cognitive, social, and psychological dimensions of corrective feedback. In R. Batstone (Ed.), *Sociocognitive perspectives on language use and language learning* (pp. 151-65). Oxford University Press.
- Field, A. (2009) *Discovering statistics using SPSS* (3rd ed.). Sage Publications.
- Fisher, R. (2005). *Teaching children to learn* (2nd ed.). Nelson Thornes.
- Fives, H., & Gill, M. G. (2015). *International handbook of research on teachers' beliefs*. Routledge.
- Freire, P. (2004). *Pedagogy of indignation*. Paradigm Publishers.
- Girgin, U., & Brandt, A. (2020) Creating space for learning through 'Mm hm' in a L2 classroom: Implications for L2 classroom interactional competence. *Classroom Discourse*, 11(1), 61-79. <https://doi.org/10.1080/19463014.2019.1603115>
- Gorjian, B., & Habibi, P. (2015). The Effect of conversation strategies on the classroom interaction: The case of turn taking. *Journal of Applied Linguistics and Language Learning*, 1(1). <https://doi.org/10.12691/education-6-7-9>
- Grugeon, E., & Hubbard, P. (2006). Learning through dialogue. In J. Arthur, T. Grainger, & D. Wray (Eds.), *Learning to teach in the primary school* (pp. 239-250). Routledge.
- Hall, J. K. (1993). The role of oral practices in the accomplishment of our everyday lives: The sociocultural dimension of interaction with implications for the learning of another language. *Applied Linguistics*, 14(2), 145-166. <https://doi.org/10.1093/applin/14.2.145>
- Hall, J. K. (1999). A prosaics of interaction: The development of interactional competence in another language. In E. Hinkel (Ed.), *Culture in second language teaching and learning* (pp. 137-151). Cambridge University Press.
- Harmer, J. (2001). *The practice of English language teaching*. Pearson.
- Harmer, J. (2012). *Essential teacher knowledge: Core concepts in English language teaching*. Pearson Education.

- He, A. W., & Young, R. (1998). Language proficiency interviews: A discourse approach. In R. Young & A. W. He (Eds.), *Talking and testing: Discourse approaches to the assessment of oral proficiency* (pp. 1-24). John Benjamins.
- Hellermann, J. (2008). *Social actions for classroom language learning*. Multilingual Matters.
- Hellermann, J. (2011). Members' methods, members' competencies: Looking for evidence of language learning in longitudinal investigations of other-initiated repair. In J. K. Hall, J. Hellermann, & S. Pekarek Doehler (Eds.), *L2 interactional competence and development* (pp. 147-172). Multilingual Matters.
- Ingram, J., & Elliott, V. (2015). A critical analysis of the role of wait time in classroom interactions and the effects on student and teacher interactional behaviours. *Cambridge Journal of Education*, 46(1), 37-53. <https://doi.org/10.1080/0305764X.2015.1009365>
- Ishida, M. (2009). Development of interactional competence: Changes in the use of ne in L2 Japanese during study abroad. In H. T. Nguyen & G. Kasper (Eds.), *Talk-in-interaction: Multilingual perspectives* (pp. 351-385). University of Hawai'i National Foreign Language Resource Center.
- Kaiser, H. F. (1974). An index of factorial simplicity. *psychometrika*, 39(1), 31-36. <https://doi.org/10.1007/BF02291575>
- Kasper, G. (2006). Beyond repair: Conversation analysis as an approach to SLA. *Themes in SLA Research*, 19(1), 83-99. <https://doi.org/10.1075/aila.19.07kas>
- Kelley, K., & Maxwell, S. E. (2010). Multiple regression. In G. R. Hancock & R. O. Mueller (Eds.), *The reviewer's guide to quantitative methods in the social sciences* (pp. 281-297). Routledge.
- Kline, R. (2016). *Principles and practices of structural equation modeling*. The Guilford Press.
- Knapp, M. L., & Hall, J. A. (2007). *Nonverbal communication in human interaction* (5th ed.). Thomas Learning.
- Ko, S. (2014). The nature of multiple responses to teachers' questions. *Applied Linguistics*, 35(1), 48-62. <http://dx.doi.org/10.1093/applin/amt005>
- Kramsch, C. (1986). From language proficiency to interactional competence. *The Modern Language Journal*, 70(4), 366-372. <https://doi.org/10.1111/j.1540-4781.1986.tb05291.x>
- Li, S. (2010). The effectiveness of corrective feedback in SLA: A meta-analysis. *Language Learning*, 60(2), 309-365. <http://dx.doi.org/10.1111/j.1467-9922.2010.00561.x>
- Li, Y., & Walsh, S. (2023). Technology-enhanced reflection and teacher development: A student teacher's journey. *RELC Journal*. <https://doi.org/10.1177/00336882231161153>
- Luk, J. C. M., & Lin, A. M. Y. (2007). *Classroom interactions as cross-cultural encounters: Native speakers in EFL lessons* (1st ed.). Routledge.
- Lyster, R. (2015). The relative effectiveness of corrective feedback in classroom interaction. In N. Markee (Eds.), *The handbook of classroom discourse and interaction* (pp. 213-228). Wiley Blackwell.
- Lyster, R., & Ranta, L. (1997). Corrective feedback and learner uptake. *Studies in Second Language Acquisition*, 19(1), 37-66. <http://dx.doi.org/10.1017/S0272263197001034>
- Markee, N. (2015). *Handbook of classroom discourse and interaction*. Wiley.
- Meyers, L. S., Gamst, G., & Guarino, A. J. (2013). *Applied multivariate research: Design and interpretation* (2nd ed.). Sage Publications.
- Moorhouse, B. L., Li, Y., & Walsh, S. (2023). E-classroom interactional competencies: Mediating and assisting language learning during synchronous online lessons. *RELC Journal*, 54(1), 114-128. <https://doi.org/10.1177/0033688220985274>
- Negueruela-Azarola, E., García, P. N., & Buescher, K. (2015). From interaction to intra-action: The internalization of talk, gesture, and concepts in the second language classroom. In N. Markee (Ed.), *The handbook of classroom discourse and interaction* (1st ed., pp. 223-249). Wiley Blackwell.
- Nguyen, H. T. (2006). Constructing "expertness": A novice pharmacist's development of interactional competence in patient consultations. *Communication and Medication*, 3(2), 147-160. <http://dx.doi.org/10.1016/j.sapharm.2012.04.007>
- Nguyen, H. T. (2008). Sequence organization as local and longitudinal achievement. *Text and Talk*, 28(4), 523-550. <https://doi.org/10.1515/TEXT.2008.025>
- Pekarek Doehler, S. (2018). Elaborations on L2 interactional competence: The development of L2 grammar-for-interaction. *Classroom Discourse*, 9(1), 3-24. <http://dx.doi.org/10.1080/19463014.2018.1437759>
- Pekarek Doehler, S. (2019). On the nature and the development of L2 interactional competence: State of the art and implications for praxis. In M. R. Salaberry & S. Kunitz (Eds.) *Teaching and testing L2 interactional competence: Bridging theory and practice* (pp. 25-59). Routledge.
- Pekarek Doehler, S. (2021). L2 interactional competence and L2 education. In S. Kunitz, N. Markee, & O. Sert (Eds.), *Classroom-based conversation analytic research* (pp. 417-424). Springer.
- Pekarek Doehler, S., & Pochon-Berger, E. (2011). Developing 'methods' for interaction: A cross-sectional study of disagreement sequences in French L2. In J. K. Hall, J. Hellermann, & S. Pekarek Doehler (Eds.), *L2 interactional competence and development* (pp. 206-243). Multilingual Matters.

- Richards, J. C., & Schmidt, R. W. (2010). *Longman dictionary of language teaching and applied linguistics* (4th ed.). Routledge.
- Rintell, E. M. (1979). Getting your speech act together: The pragmatic ability of second language learners. *Working Papers on Bilingualism*, 17(2), 98-106.
- Ryan, J. (2015). Reconstructing miscommunications for the language classroom. *ELT Journal*, 69(4), 405-414. <http://dx.doi.org/10.1093/elt/ccv016>
- Scrivener, J. (2011). *Learning teaching: A guidebook for English language teachers* (3rd ed.). Macmillan.
- Seedhouse, P. (1996). Classroom interaction: Possibilities and impossibilities. *ELT Journal*, 50(1), 16-24. <http://dx.doi.org/10.1093/elt/50.1.16>
- Skukauskaite, A., Rangel, J., Rodriguez, G. L., & Ramon, D. K. (2015). Understanding classroom discourse and interaction: Qualitative perspectives. In N. Markee (Ed.), *The handbook of classroom discourse and interaction* (pp. 44-60). Wiley Blackwell.
- Szulc-Kurpaska, M. (2019). The role of teacher language in a young learner classroom. In J. Rokita-Jaśkow & M. Ellis (Eds.), *Early instructed second language acquisition* (pp. 57-79). Multilingual Matters.
- Tabachnick, B. G., & Fidell, L. S. (2013). *Using multivariate statistics*. Pearson Education.
- Tai, K. W. H., & Dai, D. W. (2023). Observing a teacher's interactional competence in an ESOL classroom: A translanguaging perspective. *Applied Linguistics Review*. <https://doi.org/10.1515/applirev-2022-0173>
- Tai, Y. (2014). The application of body language in English teaching. *Journal of Language Teaching and Research*, 5(5), 1205-1209. <http://dx.doi.org/10.4304/jltr.5.5.1205-1209>
- Tavakoli, P. (2011). Pausing patterns: Differences between L2 learners and native speakers. *ELT Journal*, 65(1), 71-79. <https://doi.org/10.1093/elt/ccq020>
- Urhahne, D., Zhu, C., & Wagner, M. (2020). Benefits and drawbacks of the teacher echo: Findings from a video study. *Educational Psychology*, 40(3), 336-348. <https://doi.org/10.1080/01443410.2019.1675868>
- Walsh, S. (2002). Construction or obstruction: Teacher talk and learner involvement in the EFL classroom. *Language Teaching Research*, 6(1), 3-23. <https://doi.org/10.1191%2F1362168802lr095oa>
- Walsh, S. (2006). *Investigating classroom discourse*. Routledge
- Walsh, S. (2011). *Exploring classroom discourse: Language in action*. Routledge.
- Walsh, S. (2012). Conceptualising classroom interactional competence. *Novitas-ROYAL (Research on Youth and Language)*, 6(1), 1-14. <file:///D:/Download%20Location/Walsh.pdf>
- Walsh, S. (2014). Developing classroom interactional competence. *Language Issues*, 25(1), 4-8.
- Wood, D., Bruner, J. S., & Ross, G. (1976). The role of tutoring in problem solving. *Journal of Child Psychology and Psychiatry*, 17(2), 89-100. <https://doi.org/10.1111/j.1469-7610.1976.tb00381.x>
- Yagi, K. (2007). The development of interactional competence in a situated practice by Japanese learners of English as a second language. *Hawai'i Pacific University TESL Working Paper Series*, 5(1), 19-38.
- Young, R. (1999). Sociolinguistic approaches to SLA. *Annual Review of Applied Linguistics*, 19(2), 105-132. <http://dx.doi.org/10.1017/S0267190599190068>
- Young, R. F. (2008). *Language and interaction: An advanced resource book*. Routledge.
- Young, R. F. (2011). Interactional competence in language learning, teaching and testing. In E. Hinkel (Ed.), *Handbook of research in language teaching and learning* (Vol. 2, pp. 427-443). Routledge.
- Young, R. F. (2013). Learning to talk the talk and walk the walk. *Ibérica*, (25), 15-38. <https://revistaiberica.org/index.php/iberica/article/view/281>
- Zabihi, R., & Ghahramanzadeh, B. (2022). Proficiency pairing and engagement with language in L2 peer interaction. *System*, 105, 102725. <https://doi.org/10.1016/j.system.2022.102725>